nation-states. In other words, it questions the orthodox assumption that understanding social change within a given nation-state or geographical space in the world-economy can be analysed and interpreted by just examining the dynamics and changes occurring **within** these boundaries as many would have it.⁶ The push towards a **holistic, macro-level** analysis of a historical system known as a capitalist world-economy, naturally by perforce encourages one to view social change in the making of the modern world as processes that occur **transnationally** and **transhistorically**. These proposals therefore find a common home with dependency theory of the 1960s, and in certain instances, liberal political economy à la Harold Innis (1956, 1978). In the latter, we find especially in The Cod Fisheries the theme underlining the framework of world-economy whereby Canadian economic

⁶ Unfortunately this way of analysing social change (nation-state as a unit of analysis) is endorsed by Marxists, liberals and conservatives. Besides Marx and with the exception of Rosa Luxemburg and a few others, most Marxists operating within official Marxism or Euro-centric orientations tend to utilize the nation-state as their basic unit of analysis and consider the internal changes within it as primary factors.

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LOGS FOR CAPITAL
Timber and Lumber Operations in the World-Economy
Canada 1812-1896

by
Sing Chong Chew, B.A. (Hons.), M.A.

A thesis submitted to the Faculty of
Graduate Studies and Research in partial
fulfillment of the requirements for the
degree of Doctor of Philosophy

Department of Sociology and Anthropology

Carleton University

Ottawa, Ontario

March 14, 1986

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Sing/C. Chew, B.A., M.A.

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ABSTRACT

This dissertation is concerned with the analysis of the dynamics of capital accumulation in the 19th century world-economy. It explores how a world-systems approach can help to add new insights to our understanding of the specific features of capitalism, and the historical relations between the core and peripheral areas.

Assuming the occurrence of interlinked productive activities (commodity chains) in the capitalist world-economy, the circuit of capital of timber and lumber firms operating in the 19th century is examined in a spatial and temporal manner. In this analysis, the capitalist firm is considered as a "unit of capital", and its business operations is traced in detail, and examined *vis-à-vis* the dynamics and trends of the capitalist world-system.

If continuous capital accumulation and its maximization is an underlying principle of firms operating in the world-economy, changing conditions in capital valorisation would mean that firms would have to adjust to the changes. The adjustments could extend from a further intensification of the production to a shift in geographical location of their production operations. All these strategies were

attempted by the timber and lumber firms. Hence, we find the shift of timber and lumber operations from one area of the world-economy (the Baltic region) to another (North America); and the intensification of production activities during an economic crisis by firms in order to pursue the continuous expansion and maintenance of their accumulation processes. Such pursuits required the utilization, adaptation, and the disciplining of the labour force, depending on the circumstances.

In support of these business operations of the timber and lumber firms is the state. Its actions historically have focussed on the creation and maintenance of the conditions of accumulation. Thus, the state, at different conjunctures of the accumulation process, enacted various actions and policies depending on the requirements and outcomes of the intra/inter capitalist class competition/struggle.

Such an investigation provides some reflections on historical processes and concepts, and some rethinking in these areas is suggested. In the conclusion, it is also emphasized that if we interpret social change and economic transformations in Canada within a world-systems perspective, our understanding of these changes becomes much clearer.

ACKNOWLEDGEMENTS

It is always a pleasure to arrive at this stage of the study and list the names of individuals and institutions that have supported and contributed to this research. Dick Ossenberg at Queen's University introduced me to Canadian political economy, which provided the impetus and intellectual interest that laid the background for this study. At Carleton, Don Whyte, chairman of my dissertation committee, provided generous intellectual insights and freedom to pursue some of the lines of inquiry undertaken in this research. The other members of the committee, Frank Vallee and Gertrud Neuwirth, also strongly encouraged and supported my work. Other members of the Carleton Sociology faculty that are not directly associated with this dissertation but have encouraged this work are Stephen Richer, Dennis Forcese, and Gordon Irving. To all of them I owe a note of thanks.

To undertake archival research for this study required visits to libraries and archives located in Quebec City, Fredericton, St. John, Peterborough and Toronto. These visits would not have been possible without the

funding support of the Social Sciences Humanities Research Council of Canada. The Council not only funded these trips, but also provided generous support for my research visits to the Max-Planck-Institut zur Erforschung der Lebensbedingungen der wissenschaftlich-technischen Welt, Starnberg, West Germany and the Fernand Braudel Center for the Study of Economies, Historical Systems and Civilizations, Binghamton, New York, and for me to present papers on this research at learned meetings at Tucson, Montreal and Ottawa.

For a sociologist attempting to do historical research, I have been aided by kind and cooperative archivists at the Public Archives of Canada, the New Brunswick Archives and the Baker Library, Harvard University. They are Dan Moore, Norman Ball, Burton Glendennings and Peter Gillis. Also, Keith Johnson and Robin Neill of the Carleton faculty spent time discussing with me the intricacies of Canadian history and development during the early phase of the research.

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This dissertation has been inspired by the work of Immanuel Wallerstein. A special note of thanks to him for his kindness and time during my visit to the Fernand Braudel Center, and for his continuing interest and encouragement of my work.

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PROLEGOMENA

"What is, therefore, on the agenda is redoing the work of the social sciences of the last 200 years, perhaps not from scratch but almost so. The data we have collected are at best only partially relevant. The conceptual categories need to be built up anew. The methods of our research must be redefined in terms of this new objective: explaining a concrete, large-scale system that itself comes into existence, develops over time, and at a certain point enters into structural crisis. We must do this resisting reification, but nonetheless using concepts, which always involves reification. One may call this historical sociology if one wishes or sociological history or anything else, provided one realizes this is not a subdiscipline but the entire enterprise."

Immanuel Wallerstein,
Crises: The World-Economy, The Movements,
and the Ideologies

"He regards it as his task to brush history against the grain."

Walter Benjamin,
Illuminations

In 1974, Immanuel Wallerstein's The Modern World-System I was published.¹ This work, a part of the movements of resistance² to the dominant mode of analysis in the social sciences which is universalizing, empiricist, and sectorial in outlook, proposed an epistemological and ontological reorientation towards understanding and interpreting social change in the making of the modern world. The call of Wallerstein for a break with the past practices of the social sciences is by no means the first rupture. Throughout the history of the field, there have been virulent trumpet blasts at the walls (outlook and methodology) of the dominant core ideas of the social sciences.³ Wallerstein's contribution, however, is important for it appeared during a conjuncture when developmental theories of

¹ For an account of Immanuel Wallerstein's contribution to scholarship see Charles Ragin and Daniel Chirot (1984: 306-308), "The World System of Immanuel Wallerstein: Sociology and Politics as History".

² This image of resistance is drawn from articles of Immanuel Wallerstein (1978(b), 1980(f), 1984(a)) where he discussed historically the rise of alternate schools of thought that challenged the dominant positivistic mode of analysis characterizing the social sciences since the 19th century.

³ Take for example the Adorno-Popper "Positivistic Dispute" debates of the early 1960s (see Adorno et al, 1976), the works of Max Horkheimer (1972), Jurgen Habermas (1971), Fernand Braudel (1972) and the Annales School, and others that challenge the positivistic and empiricist nature of contemporary social sciences.

modernization were being challenged.⁴ It thus added to and complemented the critique of developmental modernization theories that was already underway by proponents of dependency theory.

The reorientation that is called for in the work of Wallerstein adduces us to rethink the conceptual schemes and categories of the social sciences. What have been before the territories of other social science disciplines can no longer be the case, for to understand and interpret social change, the false sectorializing tendency of the received social sciences has to be abandoned. What was before five separately recognized social sciences (anthropology, economics, geography, political science and sociology) with their separate meaningful units of analysis should be seen as a single subject matter. Therefore, analysis of social change in the making of the modern world necessarily considers the totality of social action and thus triangulates information from these 'separate' social sciences. Notwithstanding this, the mediation of history in the understanding of social occurrences is considered necessary.⁵ Such calls

⁴ For a detailed review of dependency theory by *dependentistas* see Appendix 1.

⁵ For example, see Simiand (1985), Wallerstein (1978(b), 1979(a), 1980(f), 1984(a)) and Braudel (1972) for an explanation of the place of historical research in social analysis.

for an epistemological and ontological reorientation are also shared by others. Whether this demand is made explicitly or implicitly in such scholarship, there have been, and increasingly so, analyses of social life and social change reflecting information and modes of analyses assuming a unidisciplinary social science. The works of Theodor Adorno (1976), Max Horkheimer (1972), and Jurgen Habermas (1971) in philosophy and sociology, the writings of Andre Gunder Frank (1969, 1978(a), 1979(b)) and Samir Amin (1980) in economics, the work of Claus Offe (1984) and Theda Skocpol (1979, 1984) in political science and sociology, Eric Wolf's (1982) studies in anthropology, and Barrington Moore's (1966, 1978) and Charles Tilly's endeavours (1975, 1981, 1984) in sociology and history, to name a few, are exemplars of scholarship that transcend the boundaries of the received social sciences as we know it today.

The call for a unidisciplinary social science is matched with a proposal that the basic unit of analysis of contemporary social sciences, which is invariably the nation-state or 'national society', needs to be replaced by a macro-level, holistic approach that awards primacy to a historical economic system (the world-economy) that has an effective global division of labour with multiple state structures. This point of departure thus underscores the 'interdependency' between regions of the world and between

nation-states. In other words, it questions the orthodox assumption that understanding social change within a given nation-state or geographical space in the world-economy can be analysed and interpreted by just examining the dynamics and changes occurring **within** these boundaries as many would have it.⁶ The push towards a **holistic, macro-level** analysis of a historical system known as a capitalist world-economy, naturally by perforce encourages one to view social change in the making of the modern world as processes that occur **transnationally** and **transhistorically**. These proposals therefore find a common home with dependency theory of the 1960s, and in certain instances, liberal political economy à la Harold Innis (1956, 1978). In the latter, we find especially in The Cod Fisheries the theme underlining the framework of world-economy whereby Canadian economic

⁶ Unfortunately this way of analysing social change (nation-state as a unit of analysis) is endorsed by Marxists, liberals and conservatives. Besides Marx and with the exception of Rosa Luxemburg and a few others, most Marxists operating within official Marxism or Euro-centric orientations tend to utilize the nation-state as their basic unit of analysis and consider the internal changes within it as primary factors.

development is structured.⁷ In this context, the rise and decline of the cod trade is traced in relation to changes in the world economy and the power of nation-states in erecting tariffs and setting trade relations. This thread of a world economy structuring the socio-economic development of Canada⁸ can also be traced to two other studies of Innis (1956): The Penetrative Powers of the Price System, and Liquidity Preference as a Factor in Industrial Development.

Pursuing these impulses of Innis, Canadian political economists such as Mel Watkins (1967, 1973, 1977), and Daniel Drache (1982, 1983) have sought to revitalize the

⁷ Unfortunately the thrust of this book has often been neglected by most political economists and historians. This neglect on the part of students interested in the Staples Thesis is reflected in an evaluation of Innis's writings by Carl Berger (1976:99):

"While his study of the fur trade had a unity of form that reflected the impact of the trade, his two subsequent books, *Settlement and the Mining Frontier* (1936), and especially *The Cod Fisheries* (1940), did not. The attempt to analyse the international economy of the fisheries from 1497 to 1938, covering six regions, challenged Innis's powers of synthesis and defied his ability to impose an order on the material. Significantly neither of these publications had anything like the influence on historians as his work on the fur trade."

⁸ It should be realized that besides this emphasis, Innis also placed significant importance on geography and technology as reciprocal conditioning elements on the socio-economic development of Canada (for ex. see Chew, 1980:3-11).

Staples Theory⁹ for understanding social change in the making of Canada. For the former, instead of retaining the Innisian thread of a world economy structuring the socio-economic development of Canada, the emphasis of the Staples Approach has been inverted shifting to a focus on the society (Canada) under investigation (Watkins, 1967). Drache (1983), however, retains this thread even though his interest primarily is on explaining the economic transformation in Canada. Clearly, therefore, the crossing of disciplinary boundaries in terms of areas and units of analyses has occurred in Canadian political economy with a concomitant appreciation of the need to interpret social change within a holistic and transnational context.

By no means are these occurrences in Canadian political economy isolated instances within Canadian scholarship. Donald Whyte (1984:107,117-120), writing on the state of sociology in Canada, has also pinpointed transformations in the discipline *vis-à-vis* epistemological and paradigmatic debates. The epistemological and ontological reorientation pursued by Wallerstein that we have raised earlier is

⁹ Various students of the works of Harold Innis such as Robin Neill (1977), have suggested that Innis's economic ideas on Canadian development were never concretized to the level of theory, and thus it would be more pertinent to view Innis's economic suggestions as an approach towards understanding Canadian socio-economic history.

repeated in sociological discourse in Canada. In Whyte's (1984:107) words:

"Still another variant of the critique centred on the epistemological status of current sociological theories What was at issue here was the view of society which sociology promulgated and the reification of that view in the paradigms and methods of social science. Simple haggling over whether one should displace neo-positivism with ethnomethodology or accusations that sociologists are bourgeois apologists did little beyond pointing out the need to refine the debate. For those to whom the debate was distasteful or downright repugnant, there was the retreat into safe sociology of interdisciplinary or non-disciplinary applications of technique and interpretation. For others who took the debates seriously but sought to avoid its excesses, the study of Canadian society led them to introduce alternative models, methods and theories; to redefine the unit of analysis, and to read the historical account of Canada's social and economic development. This reorientation of Canadian studies in the social sciences has produced a significant paradigmatic shift, one which associates the sociological enterprise with that of other social sciences and which, in passing back and forth across traditional disciplinary boundaries, has forged a conception of Canadian society as a whole."

(my emphases)

Particularly, in sociological studies of social change and economic transformations in Canada, there have been strong interests to pursue these studies along a holistic, macro-level, historical and unidisciplinary approach. For example, studies of economic transformations along dependency theory lines gained popularity in the 1960s and 1970s (The Canadian Review of Sociology and Anthropology (Vol. 17, No. 3, 1980) published a whole issue dedicated to the analysis

of Canadian dependency and underdevelopment)¹⁰. The work of Wallace Clement (1977), Henry Veltmeyer (1979, 1980), Arthur Davies (1971), and Richard Ossenberrg (1971, 1980), to name a few, belong to this genre. Unfortunately, with criticism being mounted at the dependency approach by Marxist scholars in the 1970s (for ex. Brenner (1977), Laclau (1971)), the theory has lost some of its lustre and vitality in Canada. The result of this is that there has been an emphasis on utilizing class analysis and other basic tenets of orthodox Marxism to understand socio-economic transformations in Canada (for a discussion of the debate see Drache (1983)).

Even though the sociological studies described above emphasize the need to consider the holism, the interdisciplinary nature, and the interrelatedness of national economies in understanding social change and the social structure in Canada, the assumption of the primacy of a historical economic system known as the world-economy with its rhythms and trends is not fully considered.¹¹ Granted

¹⁰ In most cases, the studies which were completed, arose as a result of the upsurge of nationalist reactions to American penetration of the economy, and the coming into contact of studies of dependency originating from Latin America.

¹¹ Two exceptions to this in sociology are Paul Stevenson's (1980) article "Accumulation in the World Economy and the International Division of Labour" and Malcolm Alexander's doctoral dissertation "The Political Economy of Semi-Industrial Capitalism: A Comparative Study of Argentina, Australia and Canada". Also, in the later works of Tom Naylor (1983), socio-economic transformations of Canada are treated within a wider context of the historical processes and trends of world capitalism.

that the Canadian proponents of the dependency theory type studies would have no difficulty in reorienting their intellectual horizons towards such a unit of analysis, there has been however, little effort in this direction. Therefore, one of the thrusts of this present study is precisely to act on this inertia. In the process, it will demonstrate that by interpreting social change and economic transformations in Canada within a different epistemological perspective, our understanding of these changes become much clearer. Of course, such reorientation with the historical information presented will flow against commonly accepted notions of Canadian socio-economic transformations, but, hopefully it will also generate discourse in this area.

Notwithstanding this thrust, the other main aim of this study is to situate itself in a different epistemological position from our contemporary social scientific understanding of the dynamics of social change and capital accumulation. With the basic tenets of world-systems analysis, we will explore the historical processes and structures in the production of timber and lumber in Canada in the 19th century world-economy. In doing so, the study will address some of the issues surrounding our understanding of capitalist production and accumulation in the making of the modern world, and the historical relationships between the core and periphery in such a historical process.

It is commonly accepted by most Marxist scholars that one of the distinctive features of capitalist productive relations is distinguished by just wage labour. In view of this, understanding of social change and capitalism's dynamism is predicated on this assumption (for ex. see Laclau (1977), Banaji (1977), Poulantzas (1973), Taylor (1979), Terray (1972), Wolpe (1980)). What follows from this are research agendas that demarcate economic practices within a geographical space in a given historical period into types of economies whether they be feudal, capitalistic, etc., in nature. On most occasions, besides political programs of actions, we end up with analyses promulgating dualistic economies articulating with each other with their own specific internal dynamics, and a tendency to focus on certain parts of the world in isolation from the global process of capital accumulation. This study, however takes the view of different forms of labour relations to 'capital' and, in the process, suggests that other forms of labour relations are also depictive of capitalist productive relations.

One of the basic tenets of world-systems analysis is that from the outset the circuit of capital accumulation occurs on a world scale, whereby other parts of the world contribute to the accumulation processes in the core areas, albeit operating through a multiplicity of competing

"individual capitals" quartered in different nation-states. From this, we suggest that operations of business firms have been **internationalized** from the outset, and involve the crossing of territories over time. This would mean that contemporary understanding and acceptance of the features of 20th century business operations of companies needs to be re-examined for it assumes that the transnational character of these business operations occurred only in the 20th century (for ex. see Hymer (1979), Sunkel (1973)). Our examination of archival information of business operations of timber and lumber firms in the 19th century will prove otherwise.

In the 1970s there was a flowering of Marxist scholarship in the study of the state. Sparked by the Miliband-Poulantzas (Miliband, 1970, 1973(b); Poulantzas, 1969, 1976), and the State Derivation (for ex. see Holloway and Picciotto, 1977) debates, active interest in studies on the role and function of the state was pursued. As most of the studies were involved more in theoretical clarification, and in trying to explain the activities of the 20th century capitalist state in the absence of a historical examination of state activities throughout the history of the development of capitalism, they invariably led to certain assumptions of state functions which tend to be misleading. For example, there is a periodization of the role of the state during certain historical epochs, such as the minimalist

liberal state of competitive capitalism and the interventionist state of advanced capitalism, which we believe, rubs against the grain of history of state activities. Furthermore, with attempts to stress the specificity of the "political" by structural Marxists such as Althusser (1970) and Poulantzas (1973, 1975), the state's role in direct support of the circuit of capital accumulation was de-emphasized. Notwithstanding the specificity and importance of the "political" in understanding capitalist transformations, this present study reasserts the historical functions of the state and the continuous crucial role it plays in the reproduction and expansion of capitalist accumulation throughout the history of capitalism.

What follows, therefore, is an interpretation and configuration of historical information to explicate the historical processes and structures occurring in the periphery of the 19th century world-economy. It is presented with the hope that it will be a beneficial compensation to the atemporality and provincialism of the current dominant form of social science research. Like all interpretations and understanding of historical processes and structures in the making of the modern world, it should not be considered as a final statement, for we should be aware of the "openness of the conversation" and learn from "the basic hermeneutic wisdom that it is an illusion to suppose one could retain the last word" (Habermas, 1985:198).

CHAPTER 1

INTRODUCTION: THE OPERATIONS OF TIMBER AND LUMBER FIRMS
IN THE WORLD-ECONOMY

In a speech before the Canadian House of Commons in 1879, the Minister of Finance, Sir Leonard Tilley described Canada as a nation of "hewers of wood and drawers of water". Descriptive of the socio-economic processes of Canada at that time, these comments for us also underline the global social division of labour of the capitalist world-economy. From its origins in Western Europe in the 16th century, the capitalist world-economy has developed intensively in terms of productive forces and enlarged extensively through the incorporation of peripheral areas. The overarching nature of the capitalist world-economy engenders for us an image of a single system - the capitalist world-system - with its set of dynamics derived from the processes of capital accumulation. The intrinsic impulse of the capitalist world-system towards capital accumulation and valorisation, when viewed historically, is one which occurs on the world scale whereby peripheral and semiperipheral zones in the capitalist world-economy participate and contribute in the overall accumulation dynamics of core

centres.¹ By its nature of being capitalistic - thus inset with inherent contradictions - the capitalist world-system is distinguished by non-linear phases of growth and expansion. It progresses through fits and starts distinguished by cycles of growth and stagnation.

The global social division of labour of the capitalist world-economy is characterized by a differentiation of productive activities undertaken by different zones (core, semiperiphery, periphery) of the world-system. In spite of this differentiation, the productive activities are inter-linked in a centripetal manner with their points of destination ending in the core areas of the world-economy. Considered as chains of economic activities, these inter-linked productive activities traverse political frontiers, and their transnational character is as "descriptively true of the sixteenth-century capitalist world as of the twentieth-century" (Wallerstein, 1983(a):31). *Stricto sensu*, these chains can be also considered as representing

¹ The world-economy is comprised of three zones. The **core** is distinguished by strong state structures and a division of labour based on a wage basis. The **semi-periphery** is the next zone. This zone is depicted by a mixed division of labour comprising of wage labourers and non-wage labourers. The strength of state structures is contingent on the level of development in these areas. The third zone is the **periphery**. This zone supplies the core and semi-periphery with its natural resources and in turn, accepts from the core manufactured products. State structures are weak in this zone (see Wallerstein, 1974).

the circuits of capital of firms operating in the world-economy.

If continuous capital accumulation and its maximization is an underlying principle of firms operating in the world-economy, changing conditions in capital valorisation would mean that firms would have to adjust to the changes. The adjustments could extend from a further intensification of the production operations of the firms to a shift in geographical location of their production operations. Throughout history, all these strategies are attempted. Hence, we find changes in the production process and the shift of production operations by firms from one area of the world-economy to another in order to pursue the continuous expansion of their accumulation processes. Such pursuit of continuous expansion requires the utilization and adaptation of the labour force existing in these areas. Thus, it means the use of serfs, small commodity producers, wage workers, and others.

In support of this overall pursuit of the capitalist firms is the state. Its actions historically have focussed on the creation and maintenance of the conditions of accumulation. Thus, the state, at different conjunctures of the accumulation process, enacts various actions and policies depending on the requirements and outcomes of the intra/inter capitalist class competition/struggle.

All of the characteristics and initiatives described above can be understood as an **expression of the development of the capitalist world-economy**. By considering the inter-linked productive activities existing in the world-economy as representing the circuits of capital of firms, analysis of these circuits will uncover the nature of the accumulation processes of the world-economy, and thus define the historical relations between core and peripheral areas. Hence, the intent of this study is to move in a theoretically specified historical interpretive manner to understand concretely these historical relations between core and peripheral areas by examining the dynamics of capital accumulation of firms operating in the world-economy. In turn, this will reveal the **patterns, dynamics and processes of capitalist transformations**. Of interest to us are the **contingencies, obstacles and possibilities** faced by firms in the accumulation process. As the world-economy is beset with expansive upswings (A-phases) and stagnative downswings (B-phases) - a result of the contradictory logic of capitalism as a mode of production - the analysis also traces the strategies and actions taken by the firms and the state during a specific downturn of the world-system. Because the capitalist world-economy is defined by spatial and temporal boundaries, the examination covers certain parts of the world-economy (such as Great Britain, the Baltic countries

and Canada) over a specific *conjuncture*. With a large proportion of the circuits of capital of the firms occurring in Canada, this study also reveals the dynamics and transformations of the ~~political~~ economy of this region of the world-system. In the process, the historical relations between core and periphery are revealed more concretely.

Though this theoretical insight into the nature of the dynamics and processes of the capitalist world-economy and capitalist practice is our point of orientation, it is necessary to examine historical occurrences concretely in order to understand and elucidate further the dynamics of the circuit of capital accumulation of firms operating in the world-economy. In consideration of the availability and accessibility of historical information, the business records of firms involved in the production of timber and lumber are selected for analysis. We proceed as follows.

AN OVERVIEW OF THE CHAPTERS

The second chapter of this study will illuminate the way ahead. It proposes the adoption of the world-systems approach to guide our historical interpretation of social change, and in our case informs our interpretation and understanding of the historical information reviewed. The world-systems approach is reviewed in contradistinction to other theories of social change in the making of the

modern world. Specific attention is paid to the delineation of the processes and trends of the capitalist world-economy posited by Immanuel Wallerstein and his colleagues at the Fernand Braudel Center for the Study of Economies, Historical Systems and Civilizations. Certain theoretical distinctions made by Wallerstein on imperialism, capital accumulation, the nature of capitalist relations, capitalist crisis, and the state are examined and discussed in relation to other theoretical conceptions on these areas. In order to fruitfully examine the circuit of individual capital, a theoretical model of the circuit of capital of the firm developed by Ken Barr (1981) is adopted to guide our interpretation and categorization of the information collected.

Chapter three presents diachronically transformations in the world-economy that led to the migration and rise of timber and lumber operations in British North America. Detailed information on the social relations and conditions of timber and lumber production in one region of the world-economy, the Baltic countries, is provided as a comparative dimension for the subsequent discussion of the production of timber and lumber in Canada in the later chapters. The similarities between the Baltic countries and Canada in the way resources (money-capital) are raised for production operations, and the manner in which timber and lumber is produced should be noted. Interstate relations

and rivalry between England and France, and the levels of utilization and availability of timber resources in Great Britain is discussed in detail to draw out the socio-economic conditions and social relations which forced and encouraged both the British Government and certain fractions of the bourgeois class domiciling in Great Britain to foster an expansion of wood production in British North America. The chapter concludes with an examination of labour force formation in British North America as a consequence of the dynamics of the capitalist world-economy. The argument in this case is that wide scale migration to British North America in the early 19th century is a consequence of the processes of capitalist accumulation in England, and the core-peripheral relations between England and its internal periphery of Scotland, Ireland, and Wales. The third chapter therefore lays the historical foundation for the examination of the operations of timber companies in early Canada in the subsequent chapters.

In the fourth chapter the analysis shifts spatially from the Baltic region and Europe to British North America. The penetration of timber and lumber firms from Great Britain and the United States into Canada is temporally located, and the establishment of timber and lumber operations discussed. The phases of the circuits of capital of the timber and lumber firms are traced in detail to show the

interlinked productive processes of the world-economy. The complexity of the sourcing for the production operations and the level of vertical integration is shown. The purchase and utilization of different forms of labour by the capitalist timber and lumber firms for their production operations is highlighted. Such utilization of different forms of labour control in capitalist production processes is in contrast to the orthodox Marxist definition of capitalist social relations of production. Some attempts are also made to trace the level of profits and the transfer of these profits of the timber and lumber operations back to the core areas. Evidence is provided of the permeation of state activities in the overall circuits of capital of the timber and lumber firms. The concluding section of this chapter examines the instrumental relations between the state and the bourgeoisie who owned these timber and lumber operations. Intra-capitalist competition and the extent of the power of the lumber barons is disclosed.

As the capitalist world-economy is beset with periods of stagnation, chapter five discusses the strategies and actions adopted by the timber and lumber firms during a specific stagnative phase (1873-1896) of the world-economy. Primarily, the focus is to understand specifically how capitalist firms strategically react during a downturn, and the part played by the state in this phase. The specific

barriers to capital realization for the timber and lumber firms are delineated and historical records are presented to confirm these barriers. Because of the interlinked productive processes existing in the world-economy, the argument is that downturns in the core areas are transmitted to the periphery. The chapter also discusses the series of strategic actions taken by the firms to minimize losses and to maximize their gains during the downturn. Intensification of the production process is employed as one of the strategies that led to labour unrest. The role of the state during the stagnative phase is examined in relation to its functions of maintaining capitalist accumulation. As intra-capitalist competition is rife during a downturn, the chapter concludes with a discussion on the enactment of tariffs by states to protect market opportunities.

And finally, the concluding chapter consists of some reflections on the themes and issues raised in this study. Some widely accepted historical concepts and processes are discussed in relation to our findings. The rethinking of these historical concepts and processes is suggested. The chapter ends with some methodological consideration for understanding social change in a peripheral area such as Canada.

CHAPTER 2

TRANSFORMATIONS AND REINTERPRETATIONS

"But Marxism is not a dozen people who ascribe the right to 'expert knowledge' to each other and before whom the mass of faithful Moslems must prostrate themselves in blind trust. Marxism is a revolutionary world outlook which must always strive for new discoveries, which completely despises rigidity in once-valid theses and whose living force is best preserved in the intellectual clash of self-criticism and the rough and tumble of history."

- Rosa Luxemburg,
Imperialism and the Accumulation
of Capital

2.0 A FRAMEWORK FOR ANALYSIS: THE WORLD-SYSTEMS APPROACH

The making of the modern world for the last five centuries has been dominated by the struggle for and against the imperatives of capital accumulation (Frobel et al, 1980(a); Wallerstein, 1974, 1979, 1980(a), 1980(e); Frank, 1978, 1979, 1980(c); Amin, 1974). This accumulative process has been from the very outset based on the requirements and tendency of capital valorisation pursued by 'agents of capital' on a world scale. Because of the inherent structured requirements and conditions necessary for capital valorisation to take place, capitalist growth generates a totalising effect on social organization and institutions whereby different regions of the world are painted in the image of capitalism's hues. But this encompassing influence does not mean that the historical specificity of different

regions is eradicated completely. Rather, each specific region is transformed and shaped accordingly to conform to the tendencies of world capital accumulation. Thus, we find the splitting off of zones into respective positions in the global division of labor to comply with the demands of capital valorisation. Historically, we discover that these transformations and upheavals did not, on most occasions, occur in a "silent surrender"; rather, conflicts in terms of interstate rivalry, inter and intra-class struggles are the norm rather than the exception.

Admittedly we have sketched an image of the history of world development (i.e. capitalist development) along a line of inquiry guided by a specific theoretical approach - the world-systems perspective.¹ It is intended to reveal and outline how this approach explains societal development in contradistinction to other explanations of socio-economic changes proposed by stage, diffusionist and modernization theorists. In the case of the modernization-developmental approach, the main proponents such as Rostow (1960), Pye (1962), Parsons (1964), Hoselitz (1960), Lerner (1965) and McClelland (1967) have contended that socio-economic

¹ In this study, world-systems analysis which is the term depicting the approach we will utilize, will be used synonymously with world-historical approach or world-economy perspective. These three terms have been used interchangeably by the main proponents of this approach.

progress (or the lack of it) is due to the presence (or absence) of ingredients in each respective country which are necessary for development to occur. Their positing of these necessary characteristics of development are based, *ipso facto*, on an ideal type of developed society conjectured within a value framework which is basically Western. Thus, when a particular country is experiencing difficulties in achieving any progress in socio-economic growth, the explanation invariably revolves around the lack of the necessary ingredients of development, whether they be cultural, psychological-sociological or economic. Therefore, the problems and obstacles to change and development in societies along such a modernization-developmental perspective tend to be, in the main, rooted internally. However, with an optimistic attitude, these developmentalists would insist that such handicaps are temporary, and in the long run all countries will achieve progress and development.²

Proposals of this vein have engendered research questions oriented towards analysing the stages particular societies have attained along the continuum from traditional to modern or the socio-psychological profiles of the social and institutional organizations in each particular case. On

² For a detailed and succinct critique of these modernization developmental approaches, see Andre Gunder Frank's (1969:21-94) Sociology of Development and Underdevelopment of Sociology.

the whole, however, the modernization-developmental perspective has had difficulty explaining the gaps in growth between countries, the lack of autocentric self-sustaining development, the particularized economic specialization of some countries, and the persistent impoverishment of most parts of the globe. Such an inability is mainly the consequence of viewing the problems and obstacles to development as concentrated exclusively on **conditions internal to the particular country** instead of understanding the process as a result of mechanisms tying the country to advanced centres of the capitalist world. Furthermore, the totalising and destructuring effects of capitalist accumulation on societal development is not fully considered by the modernization theorists.

Faced with such prospects, how then do we proceed? Our introductory theoretical-historical sketch of world development hints at and assumes an alternative approach towards understanding socio-economic changes. This orientation analysing social change in the modern world generates research questions which attempt basically to explore the issues left unexplained by the modernization-developmental approach. Not only does world-systems analysis try to provide explanations to the silences left by developmentalists, it introduces a methodological reorientation, requiring the researcher to understand **capitalist development as a**

totality" occurring within a single capitalist world-economy.³ What this means is that the capitalist world-economy is not simply the cumulation of the national economies, each of which functions according to its own laws of motion, connected by external trade.⁴ Rather, these "national economies" are elements of an all embracing capitalist world-economy with its singular division of labor

³ Such a reorientation finds support in the work of Andre Gunder Frank (1978:251): "Most easy to resolve, in principle, is the question of the extent of the global system as an alternative to the ideal and often idealized units of analysis that are so widely used in social and historical studies, such as the village, tribe, nation (state) or (European) continent and their supposed past or present, defining characteristics. It may easily be argued that most of these do not exist in the past or the present, and cannot be understood in isolation from each other and from the process of world history as a whole."

⁴ Interestingly enough, awareness of the need to understand capitalist development along the lines of a capitalist world-economy is evident in the works of Nikolai Bukharin (1972(a)). Bukharin was one of the few early Marxists who attempted to discuss the nature of capitalism within the framework of a world-economy. In fact, his book Imperialism and the World Economy examined the dynamics of capitalist development in relation to the changing nature of the world-economy. For example, in discussing rivalry between imperial nations Bukharin writes (1972(a):17) "on the contrary, the very conflict is conditioned by the special medium in which the "national economic organisms" live and grow. The latter however have long ceased being a secluded whole, an "isolated economy" a la Fichte or Thunen. On the contrary, they are only parts of a much larger sphere, namely world economy". Later on, he (1972(a):26) defined the world economy as a "system of production relations and, correspondingly, of exchange relations on a world scale".

and its integrated set of production processes. This shift is in contrast to the modernization-developmental approach which assumes that "the theoretical unit for the study of social change is "society" in the abstract. Accordingly, the world is said to consist of a number of related but basically autonomous "societies" each moving upward along an essentially similar path of development" (Hopkins and Wallerstein, 1977:111).⁵

Furthermore, for Wallerstein (1974:11); the practice of analysing social change should be pursued with the assumption of a unidisciplinary social science. In other words, the various recognized social sciences - anthropology, economics, geography, political science, and sociology - cover (with different emphases) a single subject matter. Therefore, any meaningful attempt to understand social change should be mounted upon an awareness of the need to consider the totality of social action which embraces the entire subject matter of social science, a discipline that has been unfortunately sectorialized in

5 Theda Skocpol (1977:1075) has delineated four main methodological presuppositions which have underscored the modernization-developmental studies: a) the tendency to reify the nation-state as the sole unit of analysis, b) the assumption that all countries follow a similar path of growth, c) the disregard of transnational structure, d) the method of explanation based on ahistorical ideal types. The reader will note that these presuppositions are rejected by the world-systems perspective.

contemporary times⁶ (Wallerstein, 1979:ix). Coupled with this pronouncement, the mediation of history in the understanding of social occurrences is considered not only important but necessary. It is because as Wallerstein (1979:ix) writes:

"I believe, however, that history and social science are one subject matter, which I shall call (inelegantly, but in order to avoid confusion) historical social science. The premises are simple. One cannot talk about (analyze) any particular set of occurrences without using concepts that imply theorems or generalizations about recurrent phenomena. Thus all 'history' is based on 'social science'. However, conversely, not only is all 'social science' a set of inductions from 'history', but there are no generalizations which are ahistorical, that is universal."

Such a perspective on the unidisciplinary nature of social science and its proximity to history finds a reverberation in the works of the historian, Fernand Braudel (1972, 1974, 1977). For Braudel (1972:12):

"....social sciences cross social life in its entirety, in its 'totality', each trespasses on its neighbours' territory while convinced that it is still on its own. Economics discovers the sociology that surrounds it; history, perhaps the least structural of all human sciences, absorbs the lessons to be learned from its proximity to so many others, and tries to reflect these lessons."

The demand for an unidisciplinary approach towards the understanding of current and historical social actions is

⁶ The historical transformation of the social sciences and the critique of the splitting up of these sciences into autonomous disciplines each with its own epistemological and ontological premises is pursued further in Wallerstein's works (1979(a):vii-xii, 152-164, 1980(f), 1984(a)).

refreshing in light of the contemporary development of distinct demarcations across disciplines not only for organizational purposes, but as well, in the formulation of epistemological and ontological premises for the analysis of society. This call for an unidisciplinary apprehension of social life finds a parallel in the methodological proposals of the Frankfurt School for a critical theory of society (Adorno, 1976; Horkheimer, 1972).

Leaving aside these methodological presuppositions which our study will reflect, the world-systems perspective has proposed a theory of capitalist development and the nature of the capitalist world-economy which we will have to consider in order for us to propose a framework of analysis appropriate for our study. The theory of capitalist development as understood through a world-systems perspective shares some of the premises of the earlier Marxist-oriented dependency theory introduced in the 1960s and early 1970s by Andre Gunder Frank (1967, 1969, 1972), Fernando Cardoso (1972, 1973) and Theotonio Dos Santos (1970).⁷ To the early proponents of dependency theory such as Frank, Cardoso, and Dos Santos, the uneven development in the periphery (in

⁷ For a fuller discussion of dependency theory and its various criticisms as explicated by various social researchers in the field of socio-economic development see Appendix 1.

their case, Latin America), was a consequence of its historical relationship with foreign metropolises. This historical association engendered dependent social structures, underdeveloped growth and unequal trade patterns in peripheral societies. Thus, core-periphery (or metropole-satellite) relations provided these *dependentistas* "as the setting" for their understanding of the developmental patterns - in Andre Gunder Frank's phrase, 'the development of underdevelopment' - of underdeveloped societies (Wallerstein and Hopkins, 1977:115). The introduction of the core-periphery conception by dependency theorists supplied a dynamic component to the overall understanding of the conditions of underdevelopment and it furthered their interests towards explaining the unevenly developed status of Latin America. As we will see later on in our discussion of world-systems analysis, the core-periphery conception becomes not only a setting in explaining world development, but is central towards understanding the capitalist world-economy (Hopkins and Wallerstein, 1977:115-116). Aside from this somewhat common awareness of the core-periphery relations as a major determinant of societal growth, some of the tenor of the proposals made by the *dependentistas*, such as the weaknesses of peripheral state structures and peripheral social institutions, and the unequal division of labor bear a parallel course to the proposals made by world-systems

theorists, although in the latter case, as we will see, these issues are explicated extensively and more precisely.

According to the main proponents of the world-systems perspective, capitalist development since the 16th century can be explained by our understanding of the dynamics of the capitalist world-system. The dynamics of this system characterized by the structures and processes of the capitalist world-economy, generate both growth and contradiction which in a spatio-temporal manner, underline the sequences of expansion and stagnation of capitalist development. Thus, the research programmatic towards delineating and elaborating the structures and processes of the capitalist world-economy would then reveal the historical tendencies of capitalist development and the sources of modern social change.

The deciphering of these structures and processes is centred around the historical examination of the development of capitalism - in this sense, the growth of the capitalist world-economy - which has essentially been determined by the valorisation and accumulation of capital on a world scale. According to world-systems theorists, this valorisation and accumulation of capital which constitute the movement of capital, occur through an axial division of labor that can be distinguished on a global basis. Such a differentiation of the labor process results in an unequal exchange between

zones in terms of commodities produced in the world-economy.

With the contingencies of capital accumulation, competition is generated between individual capitalists quartered within nation-states, and between individual capitalists of different nation-states. This is because the struggle for the imperatives of capital valorisation is not only about the appropriation of the surplus product but centres as well on "the size of the surplus product and the conditions for production and reproduction in general" (Frobel, 1980(b):9). Concomitantly, we find the process of state competition and rivalry to protect and maintain the preconditions of capital accumulation. It leads to several respective functions undertaken by individual states which are contingent on the states' locations in the world-economy and the balances of power in the class struggles in each respective state. The competition and struggle along with the anarchic production history of capitalism, a consequence of the intrinsic nature and structured requirements of capital valorisation and accumulation, throws the capitalist world-economy into periodic crises of a cyclical nature.

2.1 DYNAMICS OF THE WORLD-ECONOMY

For expository purposes, and further elaboration of the world-systems perspective, the structure and processes of the capitalist world-economy can be reviewed under four

main headings: a) Capital Accumulation, b) Cycles and Secular Trends, c) Division of Labor, d) State System.⁸

2.1.1 Capital Accumulation

Insofar as the economic transformations occurring world-wide over the past five centuries have been capitalistic in nature, these changes have been determined on the whole by the movement of capital (accumulation and valorisation). Taking Marx's (1959(a-c)) theory of capital accumulation and valorisation as a point of departure, the world-systems perspective introduces three fundamental issues underlining the movement of capital which are central to the analysis of the capitalist world-economy:

- 1) Capital accumulation is and has been a single process, albeit operating through a multiplicity of competing individual "capitals" quartered in different nation-states, occurring within a world market. This means that for Wallerstein and his colleagues, Marx's *Capital* is viewed as one "depicting a theory of the accumulation process as a world-system process, in which key points are illustrated by lengthy asides on events or conditions in Britain" (Wallerstein and Hopkins, 1977:118).
- 2) It is further assumed that from the beginning the circuit of capital accumulation occurs on a world

⁸ Our discussion of world-systems perspective will be based on the works of Immanuel Wallerstein and his colleagues at the Fernand Braudel Center. It should be noted that elements of this approach can also be found in the historical works of Fernand Braudel (1977).

'scale whereby other parts of the world (such as the semiperiphery and the periphery) contribute to the accumulation processes in the core areas. What this implies is that there is a **unity** in the process of capital accumulation in that the semiperiphery and periphery are **integral** to the accumulation strategies and are a contingent part of it (Hopkins and Wallerstein, 1977).

- 3) Inclusive to the process of capital accumulation is the expansion of the capitalist world-system along a geo-political dimension. In other words, it is suggested that for the continuance and expansion of capitalist accumulation, areas of the globe which are originally external to the capitalist world-economy are **incorporated** into it. Thus, the dynamics of the movement of capital accumulation are distinguished by this **secular** tendency towards expansion (via incorporation) of the capitalist world-system.

Therefore, the world-systems perspective, by proposing that the process of capital accumulation and valorisation occurs 'all in a piece', suggests that not only does labor in the core areas contribute to the production of surplus value, but as well, the labor force in other parts of the globe furnishes this accumulation of surpluses. *Pari passu*, it is further insisted by this approach - sharing the

thesis of unequal exchange⁹ - that peripheral and semi-peripheral areas and their labor force are being placed continually in an unequal situation, reproducing the core-periphery division of labor, which on the whole has privileged the core areas.

⁹ The thesis of unequal exchange was proposed originally in the neo-Marxian political economy literature by Arghiri Emmanuel (1972(a)). Emmanuel's position is that unequal exchange occurs between core and periphery over the trading of goods. As the wages of the periphery are lower than the core, the core benefits from this exchange process whereby its products will be more expensive than those of the periphery. In other words, the periphery is selling its products below value and buying the products of the core above value. Conversely, Samir Amin (1977, 1980) in Imperialism and Unequal Development suggested revision of Emmanuel's thesis. He insisted that this notion of unequal exchange must be arrived at through the level of unequal conditions of exploitation. This means that the Third World worker is exploited more because of the unequal surplus labor (value) that is generated in his production process than that generated in the core. Amin emphasized that it is only at this level that we can really understand the notion of "unequal exchange". For Marxist economist Ernest Mandel (1975:343-376), unequal exchange in the capitalist world-economy is a consequence of the exchange of products between core and periphery which is based on unequal quantities of labor time involved in the production processes. The sources of this unequal exchange are due to a) the labor of the industrialized countries is considered more intensive on the world market than that of the periphery, b) there is no equalization of the rates of profits on the world-market. For the proponents of the world-systems perspective such as Immanuel Wallerstein and his colleagues, their views of unequal exchange tend to parallel those of Emmanuel's and Amin's (See Hopkins and Wallerstein, 1977:117-118). On the whole, usage of the concept by world-systems theorists tends to be more descriptive - i.e., using it to underline and discuss the conditions between core and periphery (See Wallerstein, 1978).

Such a point of departure underscoring the unity in the historical process of capital accumulation over core and periphery has also been proposed by other students of capitalist development. We refer here to the work of Anouar Abdel-Malek (1979) who declares that capitalist development in the West has been on the whole contingent on its amassing of 'historical surplus-value' from the continents of Asia, Africa and Latin America. Listen to the way Malek (1979:38) describes the history of "capitalist development":

"A historical period extending, in its wider circle, for over eleven centuries and, in its more specific sense, for five centuries, thus opened, during which Europe and the West succeeded in destroying the centres of power of the Orient, and in a more general manner of Asia, Africa and Latin America, and in accumulating, in the states of the then rising ("national") bourgeoisies of the West, the wealth of our Three Continents, both their material wealth and their human and cultural potentials."

Of course, such a view of capitalist accumulation is shared by Andre Gunder Frank (1978, 1979(a), 1979(b), 1980(c))¹⁰ and Samir Amin (1974, 1976, 1977, 1980)¹¹. Frank (1978, 1979(a), 1979(b), 1980(c), 1981), in reply to the criticisms (see Frank (1974)) that his earlier works (such as Capitalism and Underdevelopment in Latin America) had examined underdevelopment through Latin American eyes and

¹⁰ For an elaborate discussion of the later works of Andre Gunder Frank published post 1978 see Appendix 1.

¹¹ For a succinct exposition of Samir Amin's writings see Appendix 1.

thus failed to account for the accumulation of capital historically on a world-wide basis, asserted in his later writings that capitalist accumulation must be understood as a **single, worldwide historical process**. This call for such an analysis is reflected in his writings published post 1978:¹²

"This meant emphasizing the process of capital accumulation but so far as possible examining its different modalities in the various parts of the world simultaneously at each stage of the single world historical process, instead of doing the regional or country histories serially one after the other, each only tangentially related to the process as a whole and not at all related to each other."

(Frank, 1979(b):xiii).

Furthermore, Frank (1978, 1979(a), 1979(b), 1980(c)) agrees with the world-systems perspective that capitalist accumulation is one which occurs over the core and periphery and is uneven in nature. Being so, this results in a transfer of surpluses produced by labor in the periphery to the core areas.

Along the same vein, the direction of analysing capital accumulation as a worldwide, historical process is undertaken by Samir Amin (1974, 1976, 1977, 1978, 1980). We find such an argument especially in Imperialism and Unequal

¹² In the prefaces to World Accumulation, Dependent Accumulation and Underdevelopment, and Mexican Agriculture, Frank informs us that even though these works were published in 1978 and 1979, they were written in the late 1960's and early 1970's.

Development (1978:229) where he underscores the historical transfer of surplus labor from the periphery to the core areas: "it is true that in its developing stages the system was from the start international and unequal and the function of the periphery of the time was essential to the accumulation of money wealth."

However, it is important to realize that even though there is commonality among the above mentioned scholars in the notion that capital accumulation is a single world-wide historical process in which surpluses are transferred from peripheral to core zones, we also find quite a distinction among them in terms of the mode whereby this 'surplus value' is generated in the peripheral areas. Take Samir Amin for example. In Unequal Development, Amin insists that the capitalist system is not a capitalist mode of production on a world-wide basis. Rather, in Class and Nation, Historically and in the Current Crisis (1980:158) he interprets several inter-related modes of production within the world capitalist system.¹³ In this way, precapitalist modes of production furnish surplus labor (mainly from the peasants) which

¹³ Such a depiction of the world capitalist system comes close to the definition provided by Ernest Mandel (1975). For Mandel (1975:48-49) the capitalist world economy is an "articulated system of capitalist, semi-capitalist and precapitalist relations of production, linked to each other by capitalist relations of exchange and dominated by the capitalist world-market."

under the domination of capital is transformed into surplus value and eventually profit for the capitalists. Such a rationalization we discover in Amin's (1980:158) writings:

"For in their turn these precapitalist class societies are certainly integrated into the imperialist system. The surplus labour furnished by the exploited peasants and extorted by their traditional exploiters takes the form of commodities circulating throughout the system Thus more than two classes because there is not a single mode of production, the capitalist mode, but rather several interrelated modes within the capitalist system. It is this global domination of capital over the system that allows us to speak of value as the dominant, general category of the form of the product. Of course, the category of surplus value is more limited in its applicability and cannot, like that of surplus labour, be extended to precapitalist modes. But the domination of capital brings about the transformation of the surplus labour of the exploited producers outside the capitalist mode into surplus value and finally into profit for capital in general and for its monopoly sectors in particular."

A similar view of how precapitalist modes of production are integrated into the world capitalist system, thus generating surplus value¹⁴ for the system as a whole, is repeated in the later published works of Andre Gunder Frank (1978, 1979(a), 1979(b), 1980(c)). Frank (1978:242-243) argues that historically this was the case, with precapitalist and noncapitalist modes of production contributing to

¹⁴ Andre Gunder Frank (1978:241) and Samir Amin (1980:158) insist that surplus value is generated only in the context of a capitalist relation of production with the formation of a wage labor form of productive relationship. But they both agree that surpluses can be generated outside the capitalist social relations of production.

the [capitalist] accumulation of capital:

"A variety of noncapitalist and precapitalist relations of production - colonial, slave, second serf, but also first serf and feudal - both inside and outside Europe and Western Europe, contributed to this amassing of capital before the Industrial Revolution Marx's rhetorical observation that "the veiled slavery of the wage-workers in Europe needed, for its pedestal, slavery pure and simple in the new world" and that "capital comes (into the world) dripping from head to foot, from every pore, with blood and dirt" (1954, I:759-60) suggests not only that these "noncapitalist" sources and relations of production were essential to capitalist accumulation of capital, but they implied the forcible robbery of parts of these producers' consumption fund for the accumulation of capital (my emphases)."

This being so, for Frank, such a process whereby precapitalist modes of production participated in the overall process of capitalist accumulation continues even at a stage when capitalism is fully developed.¹⁵ To him, these precapitalist contributions are important and substantial because they further allow capital to amass and super exploit labor existing in precapitalist modes of production by not having

¹⁵ With this assertion that precapitalist modes of production participate in the overall process of capitalist accumulation, Frank (1978, 1979(a), 1979(b)) seems to come closer to Laclau's (1971) criticisms of his earlier works (1967, 1969). Laclau (1971) in his article insisted that Frank's ubiquitous description that all social relations of production in Latin America are capitalistic should be re-examined. Rather Laclau (1971) suggested that there are different modes of production existing in Latin America contributing to capitalist accumulation. This proximity of Frank's position to Laclau is also reported by Jairus Banaji (1979) in his review article "Gunder Frank in Retreat?".

to fully supplement the reproduction of labor costs. Frank (1978:241-251) writes:

"Such primary accumulation, based in part on production through non-capitalist relations of production, has been a frequent, if not constant, companion of the capitalist process of capital accumulation even in its developed stages of the dominance of wage labor and later of relative surplus value. Indeed, such primary accumulation has made a substantial, if not essential, contribution to capitalist accumulation of capital..... Instead, into the worldwide process of capital accumulation may entail *trans-formation* of relations of production from one "non-capitalist" form to another or the utilization of pre-existing forms of production to contribute to capital accumulation in combination with different circuits of circulation."

Such proposals of Frank's and Amin's on the participatory aspect of pre-capitalist modes of production in the overall capitalist accumulation processes do not resonate with the views of the dynamics of capital accumulation introduced by Immanuel Wallerstein and his colleagues. For Wallerstein, especially, the capitalist world-system is distinguished by only one mode of production - the capitalist mode (Wallerstein, 1979(a)). This system was constituted as a capitalist world-economy in the 16th century in Europe and by the 19th century had included the whole world geographically (Wallerstein, 1979(a):66). What this means for Wallerstein is that once the capitalist world-economy becomes established, other forms of social productive relationships are redefined in terms of the principles and motions of the capitalist world-system (Wallerstein, 1974:

92). Therefore, relations of production which bear similarity to feudal or other precapitalist modes of production are not evaluated as being "pre-capitalist"; rather they are forms of capitalist labor control producing for the capitalist world-economy. Wallerstein (1979(a):147) writes:

"The so-called reciprocal nexus we identify with feudalism, the exchange of protection for labour services, constitutes a feudal (*mode of production*) only when it is *determinative of other social relations*. But once such a 'nexus' is contained *within* a capitalist world-economy, its autonomous reality disappears. It becomes rather one of the many *forms* of bourgeois employment of proletarian labour to be found in a *capitalist* mode of production, a form that is maintained, expanded or diminished in relation to its profitability on the market."

Ergo, the capitalist world-system is distinguished not by just wage-labor as a definitive feature of capitalism as some Marxists would have it, but by "variegated methods of labor control for different zones of the world-economy" (Wallerstein, 1974:29). In other words, a capitalist mode of production is not based only on wage labor but rather "it is a mode of production that *combines* proletarian labor and commercialized land with other forms of wage payment and land ownership" (Wallerstein, 1979(a):147).

In this fashion, the capitalist world-economy consists of free and 'unfree labor' in different zones producing surplus value for the capitalist accumulation of capital. Wallerstein (1979(a):276) is firm on the conception that surplus value is generated regardless of the social

relations of production: "I contend that when a product is produced for exchange; and value is created greater than the socially necessary amount needed to reproduce the labor that created the product, there is surplus value, whatever the nature of the social relation at the work place". Such a view, we should note, is quite distinct from that of Amin's and Frank's which we have discussed in the previous pages.

Therefore, in the world-systems perspective, the dynamics of capital accumulation consists of different forms of "labor relationships to capital" (within a capitalist mode of production) contributing to the overall accumulation processes. The attractiveness of such a position is that it allows us to understand the dynamic interplay between different forms of "labor relationships to capital" and the part they played in the process of capital accumulation within a given historical-geographical context without having to delve into an evaluation of each specific form of "labor relationships to capital" and its correct articulation within "assumed" existing modes of production.¹⁶

¹⁶ I have in mind the modes of production debate undertaken by articulationists whereby an inordinate amount of effort is spent trying to decide on the number and possible existence of different modes of production and their articulation based on the type of social relations of production occurring, or as Foster-Carter (1978:74) caricatures this debate: "each Andean valley has its own mode of production, and individuals may change them two or three times a week like underwear".

Further to these formulations on the process of capital accumulation and valorisation, Wallerstein (1980) has reconceptualized some aspects of the widely used term "imperialism" which has some bearing on our further understanding of the circuit of capital. Early Marxian theories of imperialism took on two forms. One, articulated by Rosa Luxemburg (1968, 1972) examines the violent and non-violent forms of capital expansion (in the form of imperialism) into non-capitalist areas of the world. Luxemburg (1968, 1972) argued that these processes of capital expansion in the form of incorporation of non and precapitalist economies (a 'third' person) was a necessary aspect to resolve the internal problems of capital realization in capitalist economies - outcomes of the contradiction of capitalist accumulation.¹⁷ She demonstrates that capitalist expansion into

¹⁷ Commenting on Luxemburg's thesis of capitalist accumulation, Kenneth Tarbuck (1972:31-32) in his editor's introduction to Nikolai Bukharin's and Rosa Luxemburg's Imperialism and the Accumulation of Capital, concluded that such a position taken by Luxemburg produces a thematic that the working class of the advanced capitalist countries are joint exploiters with the capitalist class since capitalist accumulation requires the precapitalist and noncapitalist economies (Third Market) as a basis for capital realization. Tarbuck (1972:32) suggests further that, from such a perspective, "capitalism will either collapse through an assault from the 'Third World', or it will collapse when this market is removed, because of the inability to realize surplus value". Furthermore, Luxemburg's thesis that capitalism could not survive (realize) without a "third person" or "market" has been challenged by Nikolai Bukharin (1972(b)). Bukharin (1972(b)) insists that Luxemburg is wrong. For him realization is possible within a closed capitalist economy.

non-capitalist areas has occurred continuously throughout capitalism's historical development. Luxemburg (1972:145) writes:

"Accumulation is impossible in an exclusively capitalist environment. Therefore, we find that capital has been driven since its very inception to expand into non-capitalist strata and nations, ruin artisans and peasantry, proletarianize the intermediate strata, the politics of colonialism, the politics of 'opening-up' and the export of capital. The development of capitalism has been possible only through constant expansion into new domains of production and new countries. But the global drive to expand leads to a collision between capital and pre-capitalist forms of society, resulting in violence, war, revolution: in brief catastrophes from start to finish, the vital element of capitalism."

The other form more widely circulated and accepted is one based on the outline put forth by Lenin (1970) utilizing the work of Hobson (1965). Other than some minor differences, as Arrighi (1978) has pointed out between Lenin and Hobson, (such as Lenin's view that uneven development would engender conflict among capitalist countries for a redivision of the world, and the phenomenon of capitalist concentration playing a decisive role in imperialism), Lenin's depiction^{18,19}

¹⁸ Lenin's theory of imperialism has been criticized by various scholars especially his thesis that imperialism signifies the export of capital from developed capitalist countries to other parts of the world. Arrighi Emmanuel (1972(b)) has argued that during the time period discussed by Lenin, capitalist countries like England did not export new funds; rather she drew on external funds to cover her balance of payment deficit. We give the floor to Emmanuel (1972(b):51-52): "This means that from 1870 to 1914, England not only did not export new funds, but that she drew on her external

(footnotes 18 and 19 continued from previous page)

18 funds to cover her overall goods and services balance deficit..... Far from exporting their excess capital, the two main imperialist countries - and Germany too, at any rate from 1900 - drained part of the capital from the rest of the world, merely by reimporting the income from their earlier investments, and without counting commercial exploitation and terms of trade." Thus for Emmanuel (1972(b):53) "Imperialism would then have nothing to do with an internal 'over-ripeness' of capitalism that induced the export of capital. The basis of imperialist expansion would be neither the over-accumulation of capital nor the over-production of goods." This issue of capital flowing from areas outside developed capitalist nations has also been discussed by Michael Barratt-Brown (1972:54). Barratt-Brown argued that capital from England's foreign investments far outran that of capital going to the Third World and thus, he concluded that this contradicted Lenin's thesis of export of capital during the imperialist era. Along a very different ideological orientation, D.K. Fieldhouse (1961:198) has also challenged the economic statistics of Hobson and Lenin. The critiques of Lenin especially that of Emmanuel's, has been challenged by Marxists such as Ernest Mandel (1975) and Samir Amin (1977). Mandel (1975:355-356) argued that Emmanuel, in his calculations to show that capital was not exported from developed countries, had combined both long term capital flows with short term revenue flows, which for Mandel is an analytical mistake. Secondly Mandel argues that Emmanuel did not add external revenue flows to Britain to the reinvested profits. For Mandel, this would increase British foreign investments rate of profit to 10% rather than 3% as suggested by Emmanuel. Amin (1977:230) on the other hand agrees with Emmanuel's statistics, but suggests that Emmanuel should view profits which are reinvested overseas as new capital exports. The reader will surmise from this brief discussion that the critique of Lenin and the counter support of his thesis becomes very economic and begins to be based on how each individual in the debate interprets the statistics and what should be performed on this set of figures.

19 Lenin's analysis of imperialism is shared by Bukharin. Even though he is aware of the dynamics of the world economy, Bukharin (1972(a):110-114) concurs with Lenin that imperialism is a specific historical epoch, "just as finance capitalism is an historically limited epoch, confined only to the last decades, so imperialism, as the policy of finance capital is a specific historic category".

of imperialism comes very close to that of Hobson's. For Lenin, imperialism is the stage reached in capitalist development whereby capital is exported from capitalist countries. This is necessary because the increasing concentration of capital in the form of 'financial-monopoly' structures require the necessary outflow of capital for investment purposes in order for further development in capitalist economies:²⁰ "capitalism only became capitalist imperialism at a definite and very high stage of its development" (Lenin, 1970:104).

Wallerstein (1980(c):19-21) however, disagrees with this view of imperialism as a stage in the development of capitalism:

"In any case, by stressing what is said to be *new* in the capitalist world-economy after 1870, Hobson and Lenin have seriously misled us. They have separated capitalism and imperialism into two separate phenomena, leading us to construe imperialism as a "stage" of capitalist development..... Imperialism is not a stage of capitalism."

For him, imperialism should not be discussed as a secular phenomenon, rather it should be seen as a cyclical tendency which recurs throughout history (Wallerstein, 1980(c):21-23). Therefore, imperialism is viewed as a *constant* in the history of capitalist world-economy rather than as a

²⁰ Furthermore, Lenin (1970:76) viewed this export of capital as a process which will enhance the development of countries to which this capital is exported. This is contrary to what dependency theorists have proposed.

variable which occurs only at a certain stage in the development of capitalism (Wallerstein (1980(c):23).

Such remarks induce one to conceive of capitalist accumulation, and the transfer of surpluses from periphery to core areas as processes which occur **constantly over the history of capitalism**. In this manner, such a viewpoint persuades one to perceive the circuit of capital along different lines (Wallerstein, 1980(c):20). If we consider the circuit of capital as a chain of economic activities under the control of firms located in different nation-states with the prospect of imperialism being a constant, then the activities of these firms (in other words, their circuits of capital)²¹ will occur in whichever part of the world-economy that provides the **most profitable condition at any point in time regardless of the stage of capitalist development** (Wallerstein, 1980(c)). Following this, it is implied that these firms are just as likely to cross state boundaries before 1870 than say after 1870, in search of the most appropriate conditions for their reproduction. As Wallerstein (1980(c):20) remarks: "whether the Fuggers in the sixteenth century or Exxon today there is little

²¹ The circuit of capital is described as the procurement of the means of production, the production of raw materials into commodities, the circulation and distribution (sale) of these commodities and the investment of the profit as accumulated capital (Wallerstein, 1980: 20).

reason to believe that such chains were more likely to cross state boundaries after 1870 than before" or as Hopkins and Wallerstein (1977:129) claim "there is probably no significant difference in this regard between 1500 and 1975, i.e., there is no linear trend to "internationalization" since the situation was highly "internationalized from the outset". What one derives from this discussion is that capitalist firms are just as likely to operate transnationally from the very outset, i.e., since the emergence of the capitalist world-economy, to secure the most appropriate and most profitable climate to undertake their accumulative activities. Such a viewpoint concurs with the formulation of Folker Frobel et al (1980:33) on the nature of the valorisation and accumulation of capital. The position of the "international" nature of capital accumulation from the very outset is also discussed by Andre Gunder Frank (1978:251):

"From this account it would appear that capital has not so much transgressed state boundaries to become international in recent times as that the nation-state itself was formed long ago as a byproduct and servant of capital, whose existence and accumulation had already been "international" from its inception, before the nation-state was born."

As well, Portes and Walton (1981:148), commenting on capitalist world development, have revealed the existence of transnational firms as far back as 1621. When we examine early treatises on English commerce (circa 1701) found in the volume, English Tracts on Commerce, the emphasis on

locating the most profitable environment to undertake capitalist productive activities, such as the building of ships, is an important issue in these writings²²:

"Wherefore, that the *English* shipping may be cheaper than that of *Holland* ships might be built in our plantations to be sold for sufficient profit to the *Dutch*, altho' the Freight from the Plantations were not enough to pay their Passage hither ships are built in the Plantations of cheaper Materials, and might be also by cheaper Labour. Materials there for Building, are cheaper. 'Tis true indeed, that Iron, Sails and Rigging, are bought in *Europe*, and therefore must be dearer in the Plantations; however, these things are carried thither in ships that otherwise must carry empty Holds and Ballast, so that they are not dearer for the carriage: Besides, the customs upon these things to *England*, are drawn back upon their Exportation; so that they are cheaper in our Plantations than here in *England*, and indeed but little dearer than in *Holland*. But, if these things are something dearer, Timber, Rozin, Pitch and Tar, are so much cheaper; that at a medium, Materials are nothing near so dear in our Plantations.

Materials for Building there are cheaper; that these may be wrought by cheaper Labour, the Work might be performed by Negroes

The Strength of Negroes is as great; a way is shown to make their Skill as great; wherefore, they might be taught to build as well, and with equal expedition. The Wages of Negroes are not so great; as of the *Dutch* Builders; the annual Service of a Negroe might be Hir'd for half the Price that must be given to one of these. Only high Wages, or slow and clumsy workmanship, make Labour dear. Negroes may build as good ships with equal Expedition, for half the Wages that must be given in *Holland*" (McCulloch, 1952:620-621).

²² The source of this point was first brought up in an unpublished manuscript of Folker Frobels, Max-Planck-Institut, Starnberg, West Germany, "The Current Development of the World-Economy" (1980).

It seems therefore, that this form of rationalization - such as to seek out the most appropriate conditions for capital accumulation and valorisation - to increase the profitability and competitiveness of capitalistic enterprises is discussed as early as 1701 among English political economists. It thus further warrants our reconceptualization of imperialism and the nature of the process of capital accumulation of capitalist firms.²³

If this is the case, additional historical investigation is needed to fully conceptualize the requirements, opportunities and obstacles that capitalist firms have to meet in order to continue their valorisation and accumulation activities. Wallerstein's proposal of understanding

23 This means that explanations which are proffered to account for the development of characteristics of peripheral and semiperipheral societies based on the grounds that these growth patterns are a consequence of multinational interventions in the 20th century, a feature typical of the epoch, have to be reconsidered. Our view is that transnational activities of capitalist firms recur throughout the history of the capitalist world-economy, and thus should be seen more as a constant feature of the process of capital accumulation rather than a feature depicting a specific period such as that of the 20th century. In addition, Wallerstein (1980(c):20) has gone to the extent to assert that "proportionately the number of transstate chains has been quantitatively and qualitatively roughly the same from the days of the capitalist world-economy in the 16th century to the mid-20th century. Obviously, the amount of transstate economic activity has expanded absolutely, but that is because the overall amount of economic activity has expanded".

this circuit of capital accumulation as a chain of economic activities undertaken transnationally by firms quartered in particular nation-states provides us with a useful point of departure for elucidating the circuit of world accumulation. Therefore, the obstacles, processes and relational arrangements encountered by capitalist firms in their search for optimum conditions to undertake their reproductive activities become central issues for our delineation of their circuits of capital accumulation.

2.1.2 Cyclical Rhythms and Secular Trends

Tracking the dynamics of the capitalist world-economy has been a major focus in understanding the processes and secular trends of the capitalist world-system. Arguing that capitalist growth proceeds through "fits and starts" and thus "is not unremittingly linear", the Research Working Group on Cyclical Rhythms and Secular Trends (1979: 485) has proposed that the growth of capitalism is characterized by cycles of expansion and stagnation. It is further insisted by the Research Working Group that this cyclical pattern of expansion and stagnation is constitutive of the capitalist world-economy. Consequently, capitalist development is composed of periods of intensive growth, extensive incorporation of areas outside the world-

economy, stagnated downswings, and crises. Elucidation of these cyclical turbulences is critical for our understanding of the nature of capitalist development and, for this matter, capital accumulation.

In the works of Karl Marx²⁴, the *raison d'être* was to analyse and clarify the nature of capitalism and its reproductive aspects. To a significant extent, Marx revealed the inner workings of capitalist accumulation and therefore outlined the contradictory nature of capitalist accumulative activities. From this exposition, we can derive the various aspects of growth associated with the incessant requirements forced on the capitalists by the logic of capital valorisation and accumulation. Of course, we are assuming that there is the immediate purpose of capitalist production which is also geared towards an unlimited appropriation of abstract wealth in the form of money (Marx, 1968(5):503). Marx, however, having spent an exhaustive amount of time analysing and clarifying the circuit of capital valorisation, was quite brief towards a careful elucidation of periodic crisis conditions in capitalist development. No doubt, throughout the three volumes of Capital, the notion of crisis is embedded in his discussion

²⁴ I am referring in this instance to the three volumes of Capital and the three parts of the Theories of Surplus Value.

of the moments of capitalist production and circulation; and yet Marx never focussed his concerns directly on the issues of periodic crisis conditions and business cycles in capitalist development. For example, we get a flavour of his brief comments in Capital Vol. 1:

"The course characteristic of modern industry, viz, a decennial cycle (interrupted by smaller oscillations), of periods of average activity, production at high pressure, crisis and stagnation, depends on the constant formation, the greater or less absorption, and the reformation of the industrial reserve army or surplus-population..... For Modern Industry with its decennial cycles and periodic phases, which, moreover, as accumulation advances, are complicated by irregular oscillations following each other more and more quickly" (Marx, 1959(a):590-596)

Except in a limited fashion²⁵ in part two of the Theories of Surplus Value, Marx was quite silent on the issues discussed by the proponents of world-systems approach. In fact, Roman Rosdolsky (1977), commenting on the three volumes of Capital, has indicated that the discussion of business cycles for Marx was beyond his concern. Rosdolsky (1977:22) therefore felt that there are gaps in Marx's theory of crises²⁶:

²⁵ It was developed and discussed mainly to criticize Ricardo's theory of accumulation.

²⁶ This may be quite perceptive in terms of the published works, however in the original outline for Capital made in 1857, six books were envisaged by Marx. The sixth book was entitled World Market and Crises (Rosdolsky, 1977:12).

"The same applies to the problem which relates very closely to this, namely that of the business cycle - 'the alternation of prosperity and crisis' - 'whose further analysis' as Marx repeatedly stressed 'falls outside our field of study' and was perhaps intended for an 'eventual continuation' of the work. This does show, however, that Marx's theory of crisis had 'gaps', in the sense that he never again had the opportunity of dealing with the problem at its most concrete level."

Nevertheless, having stated this, one can still glean from Marx's work an explanation of crisis conditions in capital valorisation and accumulation especially in Part 2 of the Theories of Surplus Value. In Marx's view (1968 (b):492), the very nature of the capitalist mode of production engenders crisis. It is because capitalist production (of commodities) and its expansion is based on the existing level of the conditions of production, and "the unlimited desire of the capitalists to enrich themselves and to enlarge their capital". However, this by no means assumes that the consumption of these commodities will rise accordingly. Consumption for Marx, is inhibited at the outset, as the working population can only expand their consumptive patterns within certain limits. This is because the demand for labor power in the capitalist production process, although growing absolutely, decreases relatively as capitalism matures (Marx, 1959(a)). Therefore, if the capitalist mode of production is distinguished by the production of commodities for sale as exchange value, and if the sale of these produced commodities is not completed, then the

circuit of capital is interrupted. Listen to how Marx (1959

(a):115) expresses this:

"If the interval in time between two complementary phases of the complete metamorphosis of a commodity become too great, if the split between the sale and purchase become too pronounced, the intimate connexion between them, their oneness, asserts itself by producing - a crisis."

This breakdown generates a crisis of capital realization since in order for capital to realize surplus value, it must be in the form of money or abstract wealth.

Such a (potential) crisis condition is revealed further by Marx (1968(b):509) through an elucidation of the necessity and difficulty of the transformation of the commodity (for Marx the particular product of individual labor) into its very opposite form, money. Marx perceives the potential difficulty on the grounds that once a person has made a sale, and thus "has commodities in the form of money", the individual is not compelled either immediately or at all to convert (purchase) the money back into commodities (or for that matter the individual might not have money to purchase commodities). Thus "sale and purchase may fall apart. They thus represent potential *crisis* and their coincidence always remains a critical factor for the commodity" (Marx, 1968(b):509). This situation for Marx is a *crisis* of one form whereby there is a breakdown in the metamorphosis of capital. Such an event is referred to by Marx (1968(b):514) as one of money functioning as a means of circulation

having difficulty in completing the circuit of capital realisation. The other possible form of crisis condition is one of money operating as a means of payment, while acting as a measure of value and a realisation of value, being prevented from its function.

Marx (1968(b):519-524) explained the second condition of crisis in the following manner. Take for example a weaver who must pay for the whole of constant capital whose elements have been produced by the manufacturer of machines, the flax grower, the spinner and let us say, the coal producer. The individual does this through the sale of the cloth to the merchant. From the bill of exchange that the merchant gives to the weaver, the weaver pays off the creditors (i.e., flax grower, etc.). If the merchant cannot honour the bill of exchange because the sale of the cloth is not worth what it was worth at the moment of production or the cloth could not be sold assuming that a certain amount of time has passed between the final sale of cloth by the merchant and the production of the cloth; then, the obligations of the merchant cannot be met and the whole series of transactions from the flax grower to weaver cannot be completed. Thus money as a means of payment is prevented from functioning as a measure of value and a realisation of value. This results in crisis. Furthermore, it must be added that this form of crisis can only happen if the first

condition of crisis occurs. However, the first condition of crisis can emerge without the second condition of crisis existing.

To put it in another way, this discussion of crisis can be explained by the general conditions of capitalist production. Following Marx (1968(b)) we assume that there is a definite level of production occurring. Money has to be reconverted into productive capital for the circuit of capital valorisation and accumulation to continue. The value of raw materials injected into the production process is contingent on two conditions: a) variable character of natural conditions which could lower the amount of raw materials available thus raising its prices; b) instruments of production increasing more rapidly than the availability of raw materials, thus the value of these materials rises rapidly. In whichever case, this means the proportions in which money has to be reconverted into the components of the production process is upset. It leads to having more funds allocated for raw materials and less for labor which results in the impossibility of the reproduction of capital being repeated on the same scale. What follows is that we find the value of constant capital rising while fixed charges such as rent and interests remain constant. For Marx (1968 (b):516), this leads to potential crisis for capital and labor. As well, he further alludes to the fact that the

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commodities produced in this process would suffer a rise in price. If the commodity enters into other spheres as a component in the means of production, its increased price will affect the reproduction in these spheres. However, if it enters into consumption, its increased price will affect the demands for other commodities. The effect of this will be to hinder the reconversion of these other products into money. Therefore, a crisis in the production of one commodity and its final conversion into money could lead to a chain effect if the commodity, in order for it to be produced, utilizes other commodities in the production process. It could generate over-production in these other spheres. Moreover, the need of labor power decreases relatively as capitalism develops, thus expelling workers from the production processes and thereby further reducing the consumption rates of manufactured products. Therefore, Marx, in these brief passages, highlights the possible nodal points in the circuit of capital valorisation where potential crisis moments could emerge. To the extent that these crisis moments could be of a periodic nature, Marx is silent. But his works underline the immanence of crisis in the capitalist economy.

This question concerning the periodicity of expansion and downturn (stagnation) in capitalist development, for Immanuel Wallerstein and the Research Working Group on

Cyclical Rhythms and Secular Trends, is a major issue in tracking and mapping the dynamics and parameters of the capitalist world-economy (see Hopkins and Wallerstein, 1977, 1981; Research Working Group on Cyclical Rhythms and Secular Trends, 1979; Wallerstein, 1979(b), 1979(c)). In their view, the cyclical rhythms of expansion and stagnation not only define the parameter of the dynamics of the capitalist world-economy, but also provide the impulse for the secular trends. Using the proposals of N.D. Kondratieff (1935, 1979), Wallerstein and his colleagues are attempting to decipher the periodicities of expansion and stagnation (termed as logistics) of the world-economy for a period of 150-300 years in length. According to N.D. Kondratieff (1979:519-20), the dynamics of capitalist economic life reflect a cyclical patterning of approximately 50 years.²⁷ During the phase of expansion, there are profound changes in economic life. Four manifestations are associated with the beginning of the upswing: changes in technology (preceded by discoveries and inventions), the incorporation of colonial countries into the world-economy, shifts in gold production

27 There are also cycles of different lengths. For example, according to the Research Working Group on Cyclical Rhythms and Secular Trends (1979:486) and Kenneth Barr (1979:675-676), there is the Kitchin Cycle (3-4 years), the Jugler Cycle (9-11 years); Kuznets Cycle (20 years), secular price trends and logistics (150-300 years).

and in the circulation of money.²⁸ The basis for the long waves, especially for the upswing, rests on the wear and tear of capital goods and the time it takes to replace these elements of production. What is required therefore is capital investments. But the timing of capital investments in a capitalist economy does not occur in a continuous process; rather it occurs in spurts. Even so, to Kondratieff, these spurts are contingent on: 1) propensity to save; 2) supply of loan capital at low rates; 3) availability of accumulation to capitalists; 4) relatively low prices, therefore inducing savings and long term investments. Such an avenue of explaining long waves thus leads to the conclusion that stagnation and expansion is a consequence of the changes in the total social capital stock. But to Garvy (1953), Kondratieff's explanation fails to account for the transition from contraction to expansion.

Even with such limitations, Kondratieff's proposals were considered seriously by Joseph Schumpeter (1939). To Schumpeter, innovation is the underlining theme behind the pulses of capitalist economy. To this extent, the Kondratieff long waves for him represent the major patterning of

²⁸ The article by George Garvy (1953) is used to explicate the position of Kondratieff, because, as Ken Barr (1979) has stated, Kondratieff's work which was written in Russian has not been translated completely.

the capitalist economy. His explanation of cycles focusses on the timing of new investment, technology, markets and capitalist firms in the capitalist market economy. For Schumpeter, as more and more firms enter into competition with the sale of innovative products, the prices for these commodities will have a tendency to fall. This being so, business activity will reach a standstill when the production costs equal the sale price of the product. At this conjuncture, there is a downturn characterized by low business activity in terms of low market demands and capital loans. A return to an expansive swing is a consequence of total income being less than output, and expenditures of wage goods being less than total salaries. These varied social conditions provide potential demand for commodities which in turn stimulate technological innovations in production processes which occur in the next upswing.

Thus with Kondratieff's patterning of cycles of long waves having approximately 50 years interval, Wallerstein and his colleagues are using these 'Kondratieffs' to delineate phases of expansion (A phase) and stagnation (B phase) in order to understand the dynamics of the capitalist world-economy. Changes occur during these periodic cycles whereby the capitalist world system's relations of production, and the scale and composition of its forces of production undergo transformations. For example, in the A phase, there are

rapid changes (breadthwise and depthwise) in the social structure of production and accumulation; and in the B phase, there is a relative slowdown in production levels and productive capacities (Hopkins and Wallerstein, 1981).

Associated with these phases of expansion and stagnation are the secular trends, which depict and describe the development of the capitalist world-system. There are basically three such trends: 1) expansion; 2) commodification; 3) mechanization. These trends characterize the nature and directions of the structural transformations of the capitalist world-system. Historically, there is the broadening of the world-system through geographical expansion via the process of incorporation. The other direction is the deepening of the world-system's social structure through an intensive expansion of productive forces and the reconstitution of social relations of production²⁹ (Hopkins and Wallerstein, 1981:235-236).

²⁹ It is interesting to note that Nikolai Bukharin, in Imperialism and World Economy, alluded to this tendency of the transformation of the capitalist world-economy: "International connections may grow in scope, spreading over territories not yet drawn into the vortex of capitalist life. In that case, we speak of extensive growth of the world economy. On the other hand, they may assume greater depth, because more frequent, forming, as it were, a thicker network. In that case we have an intensive growth of the world economy. In actual history, the growth of world economy proceeds simultaneously in both directions" (Bukharin, 1972(a):28).

Briefly, the three secular trends are characterized by Hopkins and Wallerstein (1977) as follows:

a) **Expansion:** This trend relates to the growth of the capitalist world-economy which develops by the incorporation of external areas outside its boundaries. It is a process of peripheralizing these external areas through the integration of the labor processes of the external areas into the world-economy's division of labor. Besides this outer expansion course, there is also an inner expansion direction, whereby areas within the outer boundaries of the world-economy are incorporated.

b) **Commodification:** To Hopkins and Wallerstein (1977), this is the process whereby in the course of the growth of the world-economy, land, labor and natural resources are transformed into commodities available for sale in the market place. The metamorphosis of labor is described as the process of proletarianization. However, it is not implied from this that capitalism is characterized just by the wage labour - capital relationship; rather it is suggested that there is a historical tendency towards such a development. Therefore the process of commodification of labor is the conversion of the working population into a **relation-with-capital** condition.

c) **Mechanization:** This trend describes the growing mechanization of all production processes on a world-wide scale.

However, there are degrees of mechanization among the three zones of the capitalist world-economy such that they can be located on a continuum. Perceived in this manner, there is a tendency to a different ratio between fixed and variable capital, whereby in the long run the ratio becomes greater.

So far, therefore, there is the premise that the ongoing capitalist world system exhibits a pattern of cyclical rhythms of expansion and stagnation, and a set of movements characterized as secular trends with monotonic tendencies thus proceeding and possibly transforming the structure of the system as a whole. The linkage between these cyclical rhythms and secular trends thus would reveal a series of tensions in the capitalist world-economy that would likewise accelerate and as well inhibit the growth of the system. Accordingly, the contradictions of the capitalist system find expression in the monotonic movement of the secular trends. The secular trends of commodification in the form of proletarianization of labor, and the expansion and incorporation of external areas of the world-system, provide avenues whereby the anarchic tendency of the capitalist production processes and their contradictions may work themselves out. That is, overcoming the contradictions of the capitalist world-system leads to a further secular trend towards proletarianization which could increase the demand for commodities; or the trend of incorporation of

external areas would engender cheap labor power or natural resources for capitalist production. Thus, the trends reveal how the capitalist world-system overcomes its contradictions. However, there is a limit towards the resolution of the contradiction of the capitalist world-system via these secular tendencies of the system (Wallerstein, 1980(d):173).

Having discussed these preliminary issues on cyclical rhythms and secular trends, perhaps it would be fruitful to examine further the work that has been accomplished thus far on the long waves of capitalist development. To the Research Working Group on Cyclical Rhythms and Secular Trends (1979) (from here on referred to as the Cycles Group), there are basically five characteristics to capitalist growth: mechanization, contractualization, commodification, interdependence and polarization. To briefly elaborate: a) **mechanization** describes the process of the increasing use of machinery in the production of commodities (in other words, the growth of fixed capital); b) **contractualization** refers to the fact that more and more social relations are regulated and governed by contract, whether this be the relation to land or labor; c) **commodification** means the transformation of land and labor into commodities which is made available on a contractual basis (Research Working Group, 1979:484); d) **interdependence** is the development of a growing level of integration between the production processes of

different zones of the world-economy; e) **polarization** is characterized as the growing unevenness in rates of development between zones, increasing degrees of rates of accumulation of world capital between core and periphery of the world-economy and the rising level in the differences in social structure. For example, the latter can be associated with different modes of organization of labour processes (wage labor to share-cropping) and also to political structures (liberal to totalitarian).

With these dimensions - which exhibit contradictions and tension - describing the "growth" of the capitalist world-economy, one cannot in any manner visualize the "growth" of the capitalist world-system to be linear; instead the Cycles Group (1979:483-485) suggests a "cyclical" pattern to be a more appropriate description. In this manner, the Kondratieffs as discussed earlier, could then be utilized to understand this periodic patterning of the capitalist world-economy.

According to the Cycles Group, analysing these phases of expansion or stagnation will require an understanding of not only the economic processes but as well the politico-cultural dimensions, keeping in mind the existence of an axial division of labor. Because of the inherent contradiction in capital valorisation and accumulation, the Cycles Group (1979) argues that this tendency generates self-

limiting parameters which in turn engender a phase of stagnation. However, theoretically this phase of stagnation must be followed by a phase of expansion.

The self-limiting aspect of capitalist production provides certain conditions (to an extent as factors such as political, cultural and the division of labor also play a part) for the phase of stagnation. Because capitalist production is characterized by "non-coordination in production decisions" and a relatively "stable world demand" due to the social distribution of rewards on the world scale, this has the tendency of leading to over-production. Hopkins and Wallerstein (1977:133) address this tendency: "The cyclical fluctuations of the growth of the world-economy may be accounted for by the periodic interruptions in the supply/demand mechanism associated with economic production and consumption. Essentially the basis of the "crisis in capital accumulation is ultimately the discrepancy between production and consumption". This is because capitalist production processes are undertaken by firms quartered in different nation-states whose goals are to maximize profits, and thus production decisions are directed towards this aim. However, the income distribution of the world is determined socially and politically in relation to the zones of the world-economy, this being so, market demand is thus essentially a function of this distribution. To Hopkins and

Wallerstein (1977:133), world production of capital goods has the tendency to increase over world production of wage/consumer goods. At the same time, world demand for consumer goods has a definite limit because of the world distribution of income. Thus, overproduction of consumer goods results due to an inadequate market demand. The ensuing condition is the emergence of crisis due to the "unused capacity in productive enterprises" (Hopkins and Wallerstein, 1977:133).

In a later study by the Cycles group (1979), this contradiction of supply and demand is made even more explicit by a further delineation of high wage zones and low wage zones applied respectively to core and periphery. It is argued that the core produces high wage commodities and the periphery produces low wage commodities. Having stated this, the Cycles Group (1979:495-6) proposed that demand for low wage commodities is a function of the demand for high wage commodities which in turn equals a function of effective world demand. At an expansionary phase (A1), it is assumed that demand for high wage commodities is greater than the supply of high wage commodities and this is also the case for low wage commodities. Such a situation leads to increased production for high wage and low wage commodities. Because of the restrictive demand levels according to such factors as historical and political distribution of

income, and with the anarchy of capitalist production, a transition phase is reached when there is a stagnation of low wage and high wage commodities. This is followed by the consequent B1 phase with a high level of unused productive capacities and a narrowing of the supply and demand equation to being equal or where demand decreases appreciably. During these times, class struggles lead to a world income redistribution which provide the conditions for further increasing demand. With the return of A2 phase, there is a resurgence of the demand for high wage commodities due to the income redistribution and the elasticity of the demand for these high wage commodities. Demand for low wage commodities also begins to increase appreciably, but its magnitude is not as high as the demand for high wage commodities. Thus, a period of expansion ensues. Furthermore, according to the Cycles Group, high wage goods production tends to shift from core areas to semi-peripheral areas during phases of stagnation as the low demand for these goods during the B phases require low production costs. As the semi-periphery and periphery are low wage zones, this aids in the reduction of production expenses. In the opposite direction, one would see the shift of low wage goods back to core areas due to the low level of investments in the production of high wage commodities in the core areas. Therefore, cycles of expansion and stagnation

reflect the development of the capitalist world-economy. These expansive and stagnated phases can also be correlated to the rivalry between states and the associated winning of hegemonic power by a particular nation-state (this will be discussed later).

Nonetheless, the period of stagnation reflects changes in the world-economy and the consequent transformations in the social structure of the world-system which we should now discuss. The downturn in the world-economy exhibits a growing decline in profits among capitalist firms. On the demand side, as we have described, the sale of consumer goods becomes slower. In Wallerstein's view (1979(b):75), these crises conditions can be seen at the level of the world-economy as a whole and as well at the level of the firm.

Examining this at the level of the firm, it is suggested that in order to retain its profit levels, the firm's production costs must either be reduced or its share of the market must be expanded. This can be achieved by either increasing efficiency through more investments in machinery or extracting a higher rate of surplus value from the work force (through raising the intensity of work, reorganizing the labor process, etc.). Furthermore, to Wallerstein (1979(b)), the share of the market can be increased by monopolizing through mergers, underselling, or

simply benefiting from other's foreclosures. All these available steps are attempted. For example, to reduce labor costs one can shift the locus of production to other areas (from city to country, or from an industrialized area in one country to other regions) or to other zones of the world-economy. Thus during this stagnated phase there is a growing concentration and centralization of capital. In a parallel empirical study of long economic cycles and the size of industrial enterprise, Alber Bergesen (1981:180) indicates that during a downturn, there is an increase of mergers between firms thus leading to a consolidation and centralization of capital.

Correspondingly, at the world-economy level, there is a rush to increase or incorporate new areas of production into the world-capitalist system. Following this, the global flow of labor is seen as being outward from the core to the semiperiphery and periphery, rather than from the periphery to the core as in the expansion phases. As well, during this stagnation phase there is the emergence of acute class struggles in various nation-states, a consequence on the part of capital to reduce costs and a result of the shift of production processes, etc. The erection of tariff barriers by individual nation-states is also a feature during the period of stagnation.

Furthermore, as the capitalist world-economy becomes

further integrated over time due to social transformation and improvements in technology, the timing of this cyclical pattern of expansion and stagnation between core, semi-periphery and periphery will be more synchronized. Thus, Wallerstein (1979(b):78) argues that depressive conditions in the core will be experienced more severely in the periphery. It has the character of lower participation in world trade or further "underdevelopment" (Wallerstein, 1979(b):78).³⁰

This phase of stagnation is followed initially by a phase of transition (T). During this period, class struggle continues, and there is an ecological exhaustion of the land, especially in peripheral areas, due to the increased exploitation on the part of capitalists to maintain their surplus accumulation. Maintenance of tariffs by nation-states whereby local industries are stimulated, especially in the semiperiphery, continues to be the order of the day.

³⁰ This is opposite to the earlier hypotheses of Frank (1969:9-10) where he suggested that satellites experienced the greatest growth during periods of least contact with the metropolises such as during occasions of war or economic depression. However, Frank (1981) seems to suggest that dependency theory, as it was developed in the 1960's, is no longer adequate for an understanding of the crisis of capital accumulation. The crisis he is referring to is the present one. In another publication, Frank (1980(c):10) is even blunter on this: "The new crisis of real world development now renders our partial development and parochial dependence theories as well as their related apparent policy solutions invalid and inapplicable".

Because of the varied class struggles throughout the phases of T and B, world income distribution shifts. This engenders demand for commodities, a factor for expansion in the subsequent A phase. Furthermore, because of the shift of production processes to other zones (periphery and semi-periphery) of the world-economy there is a formation in these zones of low wage workers which could add as another factor for further expansion during the A phase, by their developed needs to consume commodities. As well, another factor for expansion is the centralization of production processes that occur during the B phase which would lead to growing concentration of capital providing the momentum during the expansion phase.

The correspondence of A and B phases to specific time periods has been worked out tentatively by the Cycles Group (1979:499) from the 16th century onwards. For our purposes, we shall refer only to the paired 'Kondratieffs' for the 19th century:

A1:1798-1815
 B1:1815-1850
 A2:1850-1873
 B2:1873-1897

Correspondingly, Kondratieff (1979:535) has divided the long waves as:

1st Long wave: 1780's/1790 - 1810/17 rise
 1810/17 - 1844/51 decline
 2nd Long wave: 1844/51 - 1870/75 rise
 1870/75 - 1890/96 decline

Our discussion of cyclical rhythms and secular trends³¹ has concentrated so far on accumulation processes of the capitalist world-system with a brief mention of political and social processes. The Cycles Group (1979) has attempted to analyse how political and social processes are associated with the long waves of capitalist development, and has proposed some preliminary findings on this matter. With this in mind, we should turn to the last remaining themes of this excursus into world-systems analysis in our efforts to derive sensitizing questions for our study.

2.1.3 Division of Labor and Labor Processes.

The development of the capitalist world-economy rests on a world division of labor. Even Marx (1959(a): 424-425) echoes this view for a specific historical period:

"In this way East India was compelled to produce cotton, wool, hemp, jute, and indigo for Great Britain. By constantly making a part of the hands "super-numerary", modern industry, in all countries where it has taken root, gives a spur to emigration and to the colonisation of foreign lands, which are thereby converted into settlements for growing the raw material of the mother country; just as Australia, for example was converted into a colony for growing wool. A new international division of labor, a division suited to the requirements of the chief centres of modern industry springs up, and converts one part of the globe into a chiefly agricultural field of production, for supplying the other part which remains a chiefly industrial field."

³¹ The study of long waves has been of interest to other scholars. See for example, the works of Frank (1978, 1980(a), 1980(c)), Mandel (1975, 1978, 1980), Kleinenecht (1981), Gordon (1980) and Rostow (1978(b)).

Therefore, the outer zones of the world-economy are necessary complements in the development of the capitalist world-system. This being the case, these zones are reservoirs of cheap labor power, sources of raw materials, markets for the products of the core zones, and sites for production. What this means is that an axial division of labor is formed in the capitalist world-economy whereby the outer zones provide specific labour processes, and produce specific commodities (labour included) feeding into a series of production commodity chains which terminate in the core zones (Hopkins and Wallerstein, 1981). By examining these commodity chains, what is revealed are the various production processes located in the world-economy leading and contributing to the final end product for consumption. The utility of commodity chain as a concept rests on the grounds that it would unravel the interconnections between production processes located in different zones of the capitalist world-economy without the concern about geographical boundaries, and thus would inform us of the historical and continuing roots of the hierarchical global division of labor.³²

32 The source of these ideas is derived from a project proposal of Immanuel Wallerstein and Terence Hopkins of the Fernand Braudel Center entitled, Commodity Chains in the Capitalist World-Economy. References are made to the formulation of this conceptual schema in Hopkins and Wallerstein (1977).

In such a structured world division of labor, commodities such as capital goods and wage goods for core production processes and for consumptive needs of core labor forces are produced in the peripheral and semiperipheral zones. Thus, both production and reproduction processes in the valorisation and accumulation of capital in the core areas are satisfied by labor force activities in the periphery and semiperiphery. However, this depiction of the periphery's and semiperiphery's roles in the division of labor must not be conceived as a static description. Rather, the nature of their socio-economic processes must at all times be evaluated in-relation-to-core characteristics (Hopkins and Wallerstein, 1981). In other words, the distinguishing feature of political, economic and social processes between core and periphery or semiperiphery has to be judged on the basis of core-in-relation-to periphery or vice versa.

Within such a context, we find transformative processes throughout the history of the development of the capitalist world-economy whereby the working population of the world is converted systematically according to zonal locations to meet the contingencies of the conditions of capital valorisation and accumulation. Such processes, described as "methods of civilisation of capital" by Frobel (1980(b)), result in the positing of the labor force of the

peripheral and semiperipheral zones into-a-relation-with-capital (Hopkins and Wallerstein, 1981). To Hopkins and Wallerstein (1981:240), this relationship could be one of a direct or indirect nature. For example, a direct relationship may be illustrated as a field hand working for a planter. Indirectly, on the other hand, implies the provision of commodities to merchants or middlemen by the small producer. The distinguishing character of the labor process in the capitalist world-economy is thus defined by the criterion of labor-in-relation-to-capital and not restricted to just a relationship between wage labor and capital. As we have discussed previously, Wallerstein and his colleagues do not view capitalist social relations as what they are commonly assumed to be, i.e., wage labor/capital. Rather, their theoretical starting point assumes different methods of labor control participating in the circuit of capital accumulation as a definitive feature of capitalist social relations of production. In this fashion, it eliminates the defining characteristic of the proletarian as being based on the payment of wages; rather, it starts from the position that the proletarian is a producer of value, and the degree to which performing this productive role is accepted by the worker (Wallerstein, 1979(a):289). However, there is a tendency towards the formation of a wage labor force because of the pragmatics of the capital accumulation process. Thus

various methods of labor control are conceived as being representative of the capitalist world-system. For example in a particular historical-geographical point, we find the core zone with wage labor, the semiperiphery possessing wage laborers and share croppers, and the periphery having serfs and slaves, all of whom are participating in the accumulation of capital within the capitalist world-economy.

Naturally, such a position deviates from other interpretations of the labor process of capitalism. I have in mind here the 'articulation's school'; and to a certain extent even some scholars who utilize a world-system or world accumulation model. As we have discussed previously, Samir Amin (1974, 1976, 1978, 1980) and Andre Gunder Frank (1978, 1979(a), 1979(b)) tend to conceptualize the capitalist global accumulation of capital within a context whereby pre-capitalist and non-capitalist social relations of production interact. A recent study of Folker Frobels (1980(a), 1980(b)) and his colleagues, utilizing a world-economy approach, has argued as well for an awareness of the different forms which the process of capital valorisation and accumulation can take. To Frobels et al (1980(a):25), "these forms base themselves on different modes of production, preserving them, dissolving them, adapting and combining them according to the requirements, possibilities and obstacles which apply to the valorisation of capital under given, or,

self-generated circumstances". Having derived these different mixes of capitalist and 'non-capitalist' relations of production, Frobél et al (1980(a)) insist that regardless of the forms of labor, surplus value is still generated:

Notwithstanding these contributions of Frobél et al, the characterisation of capitalist social relations of production by Wallerstein and his colleagues would differ from that of Marxists (articulationists) utilizing a structural mode of production analysis.³³ For these scholars, the definitive feature of capitalism is the invariant factor of wage labor/capital relation. However, this does not mean that the capitalist mode of production does not interact with other forms of production. In fact, there is an active relationship between the two or more modes of production. Chevalier (1982:90) has summarized how these articulationists view the dynamics and development of capitalism.

"Structural Marxists have thus stressed both the structural specificity and 'homoficence' (or parallel action) of capitalism as mode of production *sui generis* with its own set of forces and relations of production, and the historical and geographic variability of capitalism's articulation to other modes or forms of production within concrete social formations."

³³ Literature on this articulation of modes of production is quite extensive. Below is a selected amount of bibliography pertinent toward the understanding of this area: Banaji (1977), Poulantzas (1973), Laclau (1971), Wolpe (1980), Althusser (1970), Terray (1972), Bradby (1980), Dupré and Rey (1980), Meillassoux (1980), and Taylor (1979).'

2

The rigour by which this debate is conducted on capitalist and other modes of production and their social relations has led to the debunking of the progressive transition from one mode of production to another. It has generated a complex conceptualization of the definitive feature of capitalism, social formation, mode of production, etc. What has emerged is the proposition that there might be a variety of modes of production interacting and coexisting with the capitalist mode of production, within a single social formation. Moreover, consensus has been reached among the articulationists that there can only be one dominant mode of production at a particular point in time and place. However, there is a debate over whether this dominant mode is capitalist in nature.

All in all, such theoretical deliberations to introduce conceptual rigour have led to concrete analyses attempting to decipher the number of modes of production existing in a given society, their interrelations and conflict within and between such social relations of production in a social formation. The inadequacies of such studies, as Frank (1978) has argued, are the tendency to focus on certain parts of the world, in isolation from the global process of capitalist accumulation of capital; and the propensity to view capitalism as only existing if the labor process is (predominantly) wage labor. Commenting on this

articulation of modes of production, Foster Carter (1978:51) has suggested sceptically that the view of capitalism that is derived from such rigorous theoretical conceptualization is one that "neither evolves mechanically from what precedes it, nor does it necessarily dissolve it. Indeed, so far from banishing pre-capitalist forms, it not only coexists with them but buttresses them, and even on occasions devilishly conjures them up *ex nihilo*".

Heuristically, therefore the world-systems approach towards understanding forms of labour processes as methods of labor control has the attractiveness of examining the dynamic interplay between household structures with its members, and the processes of capital accumulation within a historical-geographical context without having to delve into an evaluation of each specific form of labor and its correct articulation within existing (or assumed) modes of production. The unnecessary erection of barriers - in terms of deciphering modes of production and positing the necessary elements depicting a particular mode of production - by articulationists to distinguish and understand the labor process tends to induce formalistic conditions to our explanation of the processes of world capital accumulation, and would in instances obscure the intricacies of the ever-changing nature of the workings of the capitalist world-economy.

In this light, world-systems analysis of labor force formation in the capitalist world-economy has stressed the necessity for an understanding of this process within a framework of deciphering the nature and character of households. Households, therefore, provide the basic institutional unit whereby one understands the transformation of labor in terms of its nature and organization, and the structural changes in social organization in the capitalist world-economy.³⁴

2.1.4 State and Interstate Systems

Since the motor force of the capitalist world-economy is its incessant drive towards capital accumulation, this productive/accumulative activity is circumscribed and structured within state-interstate relations which help in different ways to create and maintain the preconditions for capital valorisation. These preconditions may comprise of general conditions such as guaranteeing private property and measures used to discipline the labor force, or it could be steps of providing particular services for capitalist production and reproduction of labor power. If this is the

³⁴ It is beyond the scope of this review to examine the concept of households in the world-economy. For a complete explication see Research Working Group on Household Structure and Production Process (1978) and Smith, Wallerstein and Evers (1984).

case, then our understanding and analysis of capitalist development cannot be other than conceiving the accumulative processes of the capitalist world-economy as occurring in a totality within and through "relational networks defined, guaranteed and informed by state-centred processes" (Hopkins and Wallerstein, 1981:246). *Ergo*, a prescription of this nature departs from the conception of the duality between state and economy which has become the basis of liberal social thought (Hopkins and Wallerstein, 1981:246). To Hopkins and Wallerstein (1981:241) such an enforced duality has no epistemological basis in our understanding of the capitalist world-economy.

With this contention, the role of the state and the workings of the interstate system must be examined concomitantly with our analysis of capitalist production and reproduction processes and given due weight for they affect the development of the capitalist world-system. Therefore, rather than seeing the state and interstate relations as dimensions which reflect the global accumulation process, they must be treated as necessary 'elements' in the dynamics of the capitalist world-economy. (To this end, the state/interstate systems for Wallerstein is one of the basic institutions of the capitalist world-system (Wallerstein, 1980(b)). Such a basic institutional structure does vary

over zones in terms of nature and character. According to Wallerstein (1974, 1980(a)), the core zone has a state system with a strong state machinery and the converse situation occurs in the peripheral areas.

Conceived in such manner, the state is understood within the world-systems perspective as an institution which responds to "the needs of class forces operating in the world-economy" (Wallerstein, 1980(b):747). Having expressed this, it implies that states in the capitalist world-economy hinder, promote, and support capitalist accumulation of capital. Certainly, hindering the accumulation of capital should be considered a function of a specific state, for on occasion, it is called upon to thwart external challenges to the activities of the capitalists living within its territories. In other words, states augment the advantage of the capitalist classes in the world market or within their own sovereign territories (Wallerstein, 1979(a)). Historically, this has been the pattern whereby states have interfered within the workings of the world market and have provided the necessary resources in the domination of the labor force. However, such actions by states are not without restrictive parameters. The activities of states have been limited by the existence of an interstate system which inhibits to a certain extent actions of a particular state. The level of a limitation to a significant degree is determined

by the nature of the state. What this means is that no state is totally free to transform relations within its boundaries or those outside it. Of course, this degree of freedom is contingent again on the nature of the state and whether it has colonial appendages. The emergence of the interstate system in this context is therefore the result of: 1) the balance of power between core states (competition between these states), 2) imperium in the form of colonial policies which implies the subordination of the semiperipheral and peripheral regions of the world to the needs of the core states. (Wallerstein, 1980(e)). In the latter tendency, we find particularly core state policies and strategies aimed specifically at enhancing its capitalists' accumulation of capital.

Therefore, Wallerstein (1980(b):745) impresses on us that the state "is the most convenient institutional intermediary in the establishment of market constraints in favor of particular groups." Instrumentally, the state as a social institution once created is susceptible to actions of different groups of people (inside, outside and across state boundaries) who will use it, or support it, or change it for different socio-economic aims. In this manner the policies and activities of a particular state are a consequence of the struggle between class forces. But institutions, as we know them, once formed have continued to

persist and propagate. Such persistence can be explained by the emergence of a group of people staffing these structures, who by themselves have a socio-economic interest in their continuance - thus making these structures quite independent (Wallerstein, 1980(b):746). Nevertheless, the decisive aspect of the state's function are the rules which the state enacts within its own sovereignty or upon the accumulation processes of the capitalist world-economy. Even though an understanding of these rules is important, the critical element in such an analysis is the awareness of the class foundation (bias) of such rules and the fact that it is the institutional structure of the state which implements them. Throughout the history of the capitalist world-system these are: 1) rules overseeing the social relations of production within the specific territorial jurisdiction of each particular state, as well as rules implemented and institutionalized by core states over peripheral and semiperipheral regions in order to enhance the accumulative interests of the core capitalists; 2) rules such as tariff policies, etc. which govern the flow within and across territorial boundaries of the elements and factors of production such as labor, manufactured products and capital (Wallerstein, 1980(b)). All such rules, we believe, would influence the acquisition and allocation of surplus value. With these rules, states can therefore

enforce and reform the division of labor, restrict access to markets for some while favoring others, and as well transfer income from one group to another (Wallerstein, 1979(a)). These state-run policies and regulations have critical effects on the prices of commodities produced and consumed in the world-system. In Wallerstein's opinion (1981(b)), if these rules are changed we will find shifts in relative competitiveness of specific fractions of the capitalist class within various nation-states. Thus, the roles and functions of the states are critical to the process of capital valorisation and accumulation. Admittedly, we must realize that these state activities are hindered by other states, because certain hegemonic states (core) can intervene in the affairs of others either directly or indirectly. This would then affect the latter's ability in the performance of these necessary functions. Historically, therefore, states have played a central role in maintaining the production processes of the capitalist world-economy defined by capital/labor relationship. Wallerstein (1980 (b):748) explains:

"The states have played a central role in the polarization of the population into those living off appropriated surplus, the bourgeoisie, and those whose surplus value is appropriated from them, the proletariat. For one thing, the states created the legal mechanisms which not merely permitted or even facilitated the appropriation of surplus value, but protected the results of the appropriation of enacting property rights."

Even in Marx (1968(b)) we find a discussion of the function of the state in capital's reproduction. For example, in Theories of Surplus Value, Marx (1968(b):44) considers that state ownership of land would provide the conditions of capital valorisation as it would dissociate the land from the working population. This juridical monopolization would engender a situation whereby land becomes then a condition of production confronting the laboring classes:

"Only this much is correct: Assuming the capitalist mode of production, then the capitalist is not only a necessary functionary but the dominating functionary in production..... Its only requirement is that land should *not* be common property, that it should confront the working class as a condition of production, *not belonging* to it, and the purpose is completely fulfilled if it becomes state-property, i.e., if the state draws the rent."

Even though this is the case, the bourgeoisie of the capitalist world-system, in pursuit of their class interests which goes beyond geographical and political considerations, is faced with an anomalous condition of the world-economy; a political system that has multiple centres organized around nation-states and a global division of labor that is structured in a singular fashion. Therefore, the capitalists must, in certain ways, try to increase their advantage in the world-system. Thus, as Wallerstein (1980(b)) has remarked, it has been frequent for the bourgeoisie to change their place of domicile and citizenship in order to enhance their economic advantage. State machineries have been reinforced and utilized by the capitalists during periods of

downturn in the world-economy to increase their own economic gains. It might also lead, on occasions, to the bourgeoisie of a particular nation-state defining and expounding themselves as a "national" bourgeoisie in order to further their own interests (Wallerstein, 1980(b):749).

In this regard, central to our understanding of the overall evaluation of state activities is the series of interstate relations occurring in the capitalist world-system. The particular character of the capitalist world-economy with its multiplicity of political centres generates the condition whereby there is no one central authority as is evident in world-empires (see Wallerstein, 1974). This does not mean that at any one point in time, there is no dominant/hegemonic political centre. The history of the development of the capitalist world-system reflects the rise and fall of a hegemonic political centre. Therefore, in reviewing the history of the world-economy, we find certain core nation-states have achieved periods of hegemony. Hegemony in this case is a core nation-state which has gained productive, commercial, financial and military efficiency over other core nation-states (Research Working Group on Cyclical Rhythms, 1979:497). Furthermore, during such periods of hegemonic domination, it is in the interest of the particular hegemonic nation-state to encourage free flow of goods in the world market and to further decolonization

processes. But such hegemonic control cannot last forever, since technological efficiency can be copied, wages can rise in the particular hegemonic nation-state, and as well there are other core nation-states vying for such a control of the world-market. Hegemonic decline proceeds with a higher level of interstate rivalry. At this conjuncture, tariff barriers are erected by nation-states to protect themselves and it is at this moment in history that semiperipheral nation-states could possibly gain a market advantage by improving their manufacturing abilities. In such periods where there are competition and rivalry, one would find evidence of increased colonization policies by core nation-states to maintain and protect their market advantages and the capital accumulation process. In this fashion, imperialism can be also defined as the use of political power by a core nation-state over peripheral and semiperipheral regions to enhance its own allocation. The history of capitalist development reflects this practice. In this respect, imperialism as a constant feature of the workings of the capitalist world-economy should be further noted (Hopkins and Wallerstein, 1977).

These moments of hegemony and rivalry can be correlated to the cyclical patterning of expansion and stagnation of the capitalist world-system. The Kondratieff phases of expansion and stagnation have been utilized to depict such

instances.. To date, the Cycles Group (1979:499) has worked out pairs of Kondratieffs to reflect the history of the capitalist world-economy.³⁵ For our purposes, elaboration of the 19th century hegemonic characteristics will suffice:

Hegemonic Power:	Gt. Britain	U.S.
A1 ascending hegemony	1798-1815	1897-1913/20
B1 hegemonic victory	1815-1850	
A2 hegemonic maturity	1850-1873	
B2 declining hegemony	1873-1897	

The above review of the role and function of the state and interstate systems within the framework of the world-systems approach has revealed and underscored the significance of this social-institutional structure in the maintenance and reproduction of the capitalist world-economy. These proposals of Wallerstein can aid us in our study, for they outline and disclose the conditions of the relational networks of state oriented dynamics in the process of capital valorisation and accumulation. In addition,

³⁵ It must be noted that this categorization of the patterning of Kondratieffs to hegemonic rise, maturity and decline has been challenged by Bousquet (1980). For Bousquet (1980), periods of ascending hegemony (A1 phase for Cycles Group (1980)) in fact represents hegemonic victory. In other words, hegemonic victory occurs in A phases rather than in B phases. Therefore, Bousquet suggests that political cycles might be different if not longer than Kondratieff cycles.

extractions from the writings of other scholars on the state will facilitate our discussion of the accumulation process of the capitalist world-economy as occurring within state-centred processes.

As argued by Wallerstein (1981(b)), the state as one of the basic institutions of the capitalist world-system leads us to emphasize that the activities of this political-institutional structure should be considered as a **central aspect** in our examination of capitalist development. It should not therefore be examined as a reflection (political superstructure) of the capitalist developmental process; rather it should be viewed as a necessary element in the reproduction of the capitalist world-economy. Epistemologically speaking, Robin Murray (1971, 1975:62) has also encouraged us to perceive our inquiries along such lines:

"... the state is an objective structure in any capitalist system, that contrary to liberal models, capitalism cannot be analysed as a system without taking account of the role of the state, and that more particularly, in the process of capitalist production and reproduction the state has certain economic functions which it will always perform, though in different forms and to different extents....."

If this is our point of departure, perhaps such a position can be extended further by our recalling of certain key aspects of understanding the capitalist state made by Holloway and Picciotto (1977, 1978) and the State Derivation Theorists in West Germany (see Holloway and Picciotto,

1978): The specific point made initially by these State Derivation Theorists is the proposal that our derivation of the capitalist state in bourgeois society must be conceptualized along a historical materialistic examination of the social relations of capitalist society. Paraphrasing Holloway and Picciotto (1977:77), "the state must be understood as a particular surface (or phenomenal) form of the capital relation". Capital relation in this situation is not targeted directly to mean the dominance of the economic over the political superstructure, or the specificity of the political. Rather, it implies that the "political" and the "economic" are forms of social relations existing in capitalist (bourgeois) society. Following this, the capitalist state, according to Holloway and Picciotto (1977) is therefore a historically determined form of the social relation of capital. This means that the state is not only a form alongside other forms in bourgeois society, but it is a 'necessary form in the reproduction of capitalist society' (Blanke et al, 1978). Such perspectives in the understanding of the capitalist state radically depart from that of Poulantzas's (1973, 1975, 1978, 1980), who works within an approach of being able to understand the capitalist state from a position of the "specificity" and "autonomy" of the political. Claus Offe's (1972, 1973, 1974, 1975(a), 1975 (b), 1976, 1980) studies can also, in a way, be classed in this category.

Returning to the analyses of the capitalist state by the State Derivation Theorists, the proposals for elucidating the nature and function of the capitalist state should not be derived from the (logical) laws of motion of the capital relation; rather, they must be analysed through the process of understanding state functions within the **specific historical developmental** processes of capital accumulation and capitalist society. Therefore, the capitalist state's (historical) nature and function is associated with both the process of capital production and reproduction with its contradictory class struggles. For this matter, capitalist state activities clash at times with both the working class (or segments of it) and various fractions of contending capital. Therefore, the functions of the capitalist state should be evaluated in these circumstances. As Hirsch (1978:65) so aptly puts it:

"Finally, it is implicit in the form of the 'particularization' of the bourgeois state that the state apparatus necessarily and at any time can and must clash not only with the working class or sections of it, but also with the interests of individual capitals and groups of capitals - interests determined by the requirements of valorization.

But this means that its specific functional mechanisms also evolve in the context of conflicting interests and social conflicts. That is: the concrete activities and measures of the state come into being not as a result of the abstract logic of a given social structure or of an objectively given historical process of development but only under the pressure of political movements and interests which, acting on this basis, actually succeed in pressing home their demands."

To this stage, we have discussed certain aspects of the nature and function of the capitalist state in the process of capital production and reproduction. The other important element in Wallerstein's analysis (1980(b)) of this social-institutional structure is the associated interstate system. The dynamics of the interstate system, in Wallerstein's view (1980(b)), condition not only the process of world accumulation thus affecting particular states' actions, but it also reveals core states' imperialistic policies in subordinating peripheral and semiperipheral regions of the world-economy to the exigencies and demands of core capital accumulation. Thus, the interstate system perpetuates a series of unequal exchanges between the zones of the capitalist world-system. Therefore, it leads us to suggest, that any analysis of particular state functions and actions cannot be fully realized without considering the inter-rivalry and the 'imperium' character of the interstate system.

2.2 CRITIQUE OF WORLD-SYSTEMS APPROACH

The world-systems approach is not without its critics. These criticisms have ranged from the assumed failure of the approach to account sufficiently for the institutionalized class relationships, and the dynamics of capital accumulation as a result of innovation in the core, to the

neglect of the independent efficacy of politics, thus ignoring institutionalized structures of class conflict accounting for divergent paths of state formation. The tenor of these critiques are derived mainly from proponents of more orthodox interpreters of Marx's writings, and to those attracted to the more gripping arguments of the specificity and autonomy of the sphere of "the political". With increasing interest to "re-read" Marx and with the shift away from orthodox Marxism in the 1960s and 1970s in western Marxist circles, these reviews of the world-systems approach became very compelling criticisms. How is one therefore to evaluate these critiques? The evaluation should not be one of assessing the strength of these criticisms against the many tomes of Marx's writings, though it would be a valid way. But rather, one should assess these critical issues raised by mediating them with the historical transformations in the world-economy.

Because the world-systems approach emphasizes that capital accumulation occurs on a world-scale with the periphery and semi-periphery contributing to the core's accumulation processes (due to the core/periphery division of labor), Marxists such as Robert Brenner (1977) have criticized this position. According to Brenner (1979:29), proponents of the world-systems approach (especially Wallerstein and Frank) have ceased "to locate the dynamics

of capitalist development in a self expanding process of capital accumulation by way of innovation in the core itself." Brenner's remarks are hardly innovative as they remind us of the debate between Paul Sweezy (1976) and Maurice Dobb (1976) in the 1950s over the prime movers behind the transition from feudalism to capitalism, viz. the sources of the accumulation of capital. Clearly, therefore, the question in this case is not how one can account for the state of capitalist development in the periphery, or for this matter the state of capitalist development in the core by just examining only the dynamics of capital accumulation within "national boundaries" or regions of their occurrences as Brenner would like us to do. Granted that innovation is one of the keys to capital accumulation but the question remains whether it can be the prime mover.

Married to this objection of Brenner's (1977) (and also Ernesto Laclau (1971)) is also the point that the world-systems approach tends to downplay the role and dynamics of class relations in the making of the modern world. For Brenner (1977) and Laclau (1971), the world-economy approach emphasizes the market (circulation) in its analysis of socio-economic transformations. Therefore, it relinquishes the sphere of production whereby capitalist contradiction (class relations) takes place. In this manner, specific processes of class formation and class struggles

are ignored or downplayed and thus treated as epiphenomena. Brenner (1977), therefore, argued that it was the transformation of class relations in Europe that generated the transition from feudalism to capitalism instead of the several conjunctural factors proposed by Wallerstein (1974). Wallerstein's reply (for ex. see Wallerstein (1977:104)) to this type of charge is that for him it makes very little sense to assert the primacy of production over circulation since both are crucial moments in the reproduction of capital as we know it.

Besides the above remarks, both Brenner (1977) and Theda Skocpol (1977) have also implicated Wallerstein's Modern World System I for ignoring institutionalized structures of class conflicts leading to diverging paths of state formation and state strength. In Skocpol's (1977:1080) view, Wallerstein's position on state formation and state strength is simplistic and reducible to economic and market conditions. In other words, Wallerstein is depriving politics of "any independent efficacy" (Skocpol, 1977:1080). These objections of Skocpol (1977) and Brenner (1977) have recently been addressed by Daniel Garst (1985). Garst (1985) compellingly defends Wallerstein's analysis and asserts that in Modern World-System II, Wallerstein more than adequately addresses these criticisms by delineating historically the importance of class relations (dominant

class structures) in accounting for state structures and actions of core and semi-peripheral states. In the process, according to Garst (1985:482-483), Wallerstein offers to us a more dynamic interpretation of the role and relative autonomy of the state where relative autonomy varies "with the sources of a state's power that are related to the structure of its dominant class and integration into the capitalist world-economy", than structural Marxists such as Nicos Poulantzas (1973, 1978) who "presupposes the existence of "relative autonomy" and invokes it as a functional explanation of how capitalist social formations cohere in the face of various rivalries among individual capitalists".

As in every scholastic debate a criticism is always countered with a reply. Such a process is both illuminating and stymieing. It is illuminating because it forces proponents of a specific approach to reflect on their deliberations and to take note of the critiques levelled at them, which, in the process, hopefully will sharpen the analysis. In certain instances, such criticisms are stymieing for they distract important issues that need to be researched further by undermining innovative ideas that do not necessarily measure up to contemporary agreed upon conceptions of the processes and structures of society, whether they be from the left or the right. As a result, a certain sense of disillusionment is generated and the innovative ideas raised are viewed as theoretical dead-ends.

Rather than becoming embroiled in these criticisms, and without allowing them to distract and stymie us from our intent, let us proceed along the lines of the world-systems approach to examine the timber and lumber firms operating in the 19th century world-economy.

2.3 A RESEARCH AGENDA

The world-systems perspective that we have presented has provoked and generated avenues of empirical inquiry which would lead, we believe, to a recasting of our conception of the making of the modern world. Specifically, in our case, it will provide the theoretical framework and specific research questions that will allow us to probe further the global social division of labour and thus the historical relations between the core and peripheral areas. Because of the interlinked productive activities existing in the capitalist world-economy, we propose to direct our efforts towards examining the operations of transnational timber and lumber companies operating in the 19th century world-economy in order to delineate the global social division of labour and thus historically reconstruct the relations between the core and periphery (i.e. in the areas in which these companies operate). As part of the analysis of the operations of these companies occurs within the spatio-temporal setting of Canada, the research program will

undoubtedly reveal the particularistic socio-economic developmental pattern of 19th century Canada.

Our analysis requires the intermixing of concepts with available historical knowledge. This approach should not be confused with testing the theory. Rather, by drawing out the necessary relations among the concepts and categories identified, we are interested in exploring how a world-systems approach can help to recast the state of knowledge in the area of our examination and show the trends and relationships not identified previously.

As a research programmatic, keeping in mind the availability of historical information and our own research capabilities, we will attempt to understand the operations of the transnational timber and lumber companies within the context of some of the main patterns and trends of the world-economy. To summarize these main patterns and trends that we will locate in our study:

a) Capital accumulation has always been a single process from the outset, albeit operating through a multiplicity of competing individual 'capitals' occurring within a world market. In other words, capitalism has been, *sine dubio*, international in scope since its inception. This means that different zones of the world-economy contribute to this global accumulation of capital;

b) The accumulative process occurs within structured relationships of state centered processes;

c) The contradictions and dynamics of the world-economy engender processes of incorporation and expansion in order for the world-system to overcome its antinomies; and

d) The product and conjunction of moments of capitalist development are reflected in the cyclical fluctuations of the world-system characterized by crises, stagnated and expansionary phases, and secular trends.

Assuming the above processes and dynamics of the capitalist world-economy, we can translate these characteristics into our empirical object of study. As we have discussed previously, the motor force of capitalist development is mainly centred around the accumulation of capital. And if we heed Wallerstein's (1980(c)) proposal that the circuit of capital should be considered as a chain of economic activities "under the aegis of a single firm" or "the work of a set of market-lined companies," then elucidating the circuits of capital reproduction of firms will help us to understand the processes and transformations of the capitalist world-system. In this regard, by examining how an individual circuit of capital valorizes and accumulates in the world-economy in relation to changing historical conditions and social constellations, we will be able to understand further the global division of labor and the relations between the core and the periphery.

Our efforts in this direction are aided further by the works of Ken Barr (1980, 1981). Barr (1981) has argued that Marx's treatment of the circuit of capital - often utilized by political economists in reference to social capital - is applicable in understanding the business activities of

a capitalist firm. According to Barr (1981:63), the capitalist enterprise can be considered as a unit of capital, if we view the firm as constituting an arena where specific social and economic activities occur in relation to other social institutions. Therefore, the capitalist enterprise must be perceived as a unit of social action because capital is more than just money, account books and productive capacities; capital is also a social relation "between capitalists and laborers, and among capitalists and among laborers" (Barr, 1981:63). By viewing the capitalist firm in this manner, we can then translate the circuit of capital (what we often analysed as social capital) as a circuit of an individual unit of capital, and thus pertaining to the business activities of the capitalist enterprise.

Therefore, our tracing of the circuits of transnational timber and lumber firms in Canada is facilitated further by utilizing the parameters of the conditions of capital accumulation for an individual enterprise³⁶ (Barr, 1981). Briefly, the diagram below illustrates Barr's delineation (1981:62) of the capitalist firm's circuit of capital.

³⁶ Barr (1981) has argued that Marx's elaboration of the circuit of capital does not fully account for the accumulation of capital, i.e., the moment from the realization of profits to the reinvestment of money-capital. In his paper, a fourth circuit is interjected to account for this.

Figure 1

**Reproduction of Individual Capital and
Phases of Business Activity**

With all these considerations, our study will attempt to delineate the conditions and processes of capital valorisation and accumulation faced by transnational timber and lumber companies in Canada. Barr's (1981) schema of the reproduction of the capitalist enterprise will guide us in deciphering the circuit of capital from procurement to accumulation. Of considerable weight to such an analysis of the circuit of capital will be outlining the labour process, whereby different forms of labor control are utilized to bring labor-in-relation-to-capital, and the availability of labor power. Since, as we have discussed previously, state centred processes and interstate rivalry are an aspect of the reproduction of capital and social relations, the nature

and extent of state activities and interstate relations in reference to the reproduction of the conditions of valorisation of transnational timber and lumber firms will be evaluated.

Because the capitalist world-economy exhibits phases of stagnation due to the immanent contradictions of capitalism, the study will show the transformations, dynamics and interrelations associated with these downturns. Of concern to us will be the disruptions and crises in capitalist accumulation and production processes due to the non-realization of capital and labor unrest. Furthermore, the reactions of the state and interstate systems to the economic downturn and the interrelations of state activities to the outcome of competition within branches of capitalist production, and capitalist firms with labor, will be considered. Finally, the effects of a crisis on the business activity of transnational timber and lumber companies can be comprehended by examining the strategies and measures undertaken by these firms in order to maintain their valorisation processes.

The task before us therefore entails both archival research and an assembling of secondary historical information to delineate and understand the operations of timber and lumber companies in the capitalist world-economy. It is to this that we now turn.

CHAPTER 3

MOVEMENTS IN THE 19TH CENTURY WORLD-SYSTEM: THE EXPANSION OF WOOD PRODUCTION AND LABOR FORCE FORMATION IN THE OUTER BOUNDARIES OF THE WORLD-ECONOMY

3.1 INTRODUCTION

One of the depictive features of the capitalist world-economy is the hierarchically organized and spatially distributed axial division of labor. Considered a constant characteristic of the world-system, this division of labor recurs continuously since the emergence of the capitalist world-economy in the 16th century. A further constant of this system is the historical shift in economic production locations which leads to changes in the geographic zones of the capitalist world-economy (Wallerstein, 1974; 1980(a)). Such shifts are the consequences of the pragmatics of capitalist growth with its incessant drive toward the accumulation of capital and the 'struggle' surrounding this social activity - features we have outlined in the previous chapter. Accepting the delineation and explication of these processes and trends of the capitalist world-system, can we therefore identify and summarize events and data of a historical trajectory which have occurred in order to proffer an explanation for the expansion of wood production in 19th century British North America, and the resultant shift in

geographical location of the production of wood imported into England in the 19th century?

The reply to this question is the objective of this chapter. Briefly, our task will be to provide an explanation for the shift (from the Baltic Region to early Canada) in the area of the capitalist world-economy supplying wood products - in Fernand Braudel's (1982:239) terms "capital goods" - to satiate the core area's (in this case, England's) socio-developmental and naval requirements in the 19th century.¹ This exploration will then lay the historical foundation and location for our examination of the operations of transnational timber companies in early Canada in the subsequent chapters. We pursue this undertaking as follows. It will start with a discussion of the social relations and conditions of production in an area of the capitalist world-economy (the Baltic Region) that was exporting timber to England in the 18th and 19th centuries. This will be complemented with an examination of interstate relations and rivalry between England and France in the same period. The thrust of the analysis will be to draw out the socio-economic conditions and social relations which forced

¹ By the Baltic region, we refer to all the lands whose rivers flow into the Baltic Sea and the seas of the adjacent regions of Northern Europe. Norway and parts of Russia are also included.

and encouraged both the British Government and certain fractions of the bourgeois class domiciled in Great Britain to foster an expansion of wood production in other areas of the world-economy, such as early Canada. Intertwined with this examination will be an evaluation of the migratory rates and patterns of British immigrants to British North America. Such migratory flows, a consequence of capitalist development and core-periphery relations in the British Isles, reflected the dynamics of a growing capitalist world-economy, and in this historical conjuncture furnished the labor power for the expansion of wood production in early Canada.

3.2 GREAT BRITAIN AND THE BALTIC REGION: TIMBER CONSUMPTION AND SOCIAL RELATIONS OF PRODUCTION

The mid-17th century opened with England experiencing a severe shortage of wood. This condition had been reached as a result of the past century of growth - the 'long sixteenth century' of expansion. Over the course of the century, ship-building had expanded, and by its end English ships were replacing some of the Venetian and Dutch vessels in the Mediterranean and Baltic trades. Coupled with this utilization of timber, wood was being used extensively in the construction of buildings and houses, and in manufacturing.

At this stage of English development, it was an age of wood where everything which was made or produced on a larger scale was stored in either wooden boxes or barrels (Lower, 1973). Tanners, soapboilers, gunpowder manufacturers and glass makers all required wood products, such as oak bark and potash, for their operations. The mining industry needed sturdy timber for its mine shafts. The brick manufacturers, the sugar refiners, and the salt producers used wood to manufacture their particular products. For example, as Carroll (1973:9) has commented, fifty cubic feet (a load) of hardwood was required to produce 2,000 bricks, and more than a load of hardwood was needed to produce two hundred weight of salt. Before the extensive use of coal in the iron industry, wood was used widely in the blast furnaces: 24.5 cords of wood (measuring 4 feet by 4 feet by 196 feet) was consumed to manufacture cast iron weighing 1.5 tons (Carroll, 1973:10). A further 17.5 cords were required to turn one ton of cast iron into wrought iron. Such intensive utilization of wood in the growing manufacturing industries of England was matched by the huge volume of timber employed to build ships of war and commerce. A single First Rate man-of-war required over 2,000 oak trees of 100-150 years old in its construction, besides the spruce and pine used

for its masts and spars (Naish, 1957:493).²

All the consumption of wood products throughout the 16th and early 17th centuries led to a growing depletion of English woodland and a severe shortage of timber by 1650. *Pari passu*, this condition was 'encouraged' further by the enclosure movements and the intensive growth in farming prior to the mid-17th century which led to an extensive cutting down of trees (Albion, 1926). Furthermore, the planting of oak trees was not as profitable a venture as the growing of corn, as an investment in such an enterprise would only be realized a century later (Albion, 1926).

The timber shortage was felt by manufacturers, cloth-dyers and even the Royal Navy where the "wooden walls"³ were in danger of collapsing due to the shortage of timber. This 'crisis' of timber supply forced England to obtain timber from outside its shores (Wallerstein, 1980).

² Bamford (1956:11), however, reports that for the French to build a First Rate man-of-war it required 4,000 oaks and approximately 130 to 140 thousand days of labour.

³ Naval and other historians examining the relations between seapower and the rise of England as a major core state have often referred to the ships of the Royal Navy as the "wooden walls" which facilitated England's rise to become the hegemonic state in the 19th century. (See Albion, 1926; Lower, 1973).

(a)).⁴ In Albion's (1929:vii) point of view, England "with the greatest reluctance" turned "to forests beyond the seas for timber to replace her own oak." With this deficiency in her wood supply, England had to make "a great effort in the Baltic and a greater effort than the French in North America" to obtain timber for its needs (Wallerstein, 1980(a):100). The search for an outside source does not mean that England had not imported wood hitherto from other parts of the world-economy. Ever since the High Middle Ages, potash from Russia, and pine and fir logs from the Baltic region were imported into England (Carroll, 1973:18). In fact, by the 16th century, the peripheral areas, such as Eastern Europe, were supplying wood to England (Wallerstein, 1979(a):123). However, with the critical level in the

⁴ This search by England for timber resources outside its territorial boundaries to meet its needs stands in contrast to that of France's. According to Wallerstein (1980(a)), France throughout the 17th century could rely on its own woodlands for its supply of wood because of its geographical size. Furthermore, the French were quite fearful of incurring a dependence on foreign wood, and sustaining the high production costs (in terms of wages) for France to start exploring its overseas colonies such as New France. Because of these factors, along with the perceived poor quality of timber of New France, France never fully exploited its colonial territories as England did in the later parts of the 18th century and the early 19th century. By the time shortages arose in the second half of the 18th century, France had lost New France and could only rely on imports of low volume from Italy, Albania, and Northern Europe (Bamford, 1956:71).

availability of timber and wood products in Great Britain during the mid-17th century, the resort to ensure a constant supply from other parts of the world-economy became important and necessary.

The most likely 'candidate' areas of the world-economy at this point in time which could be 'England's woodyard' were the Baltic Region and the British colonies in North America. Thus, the fir forests of the Baltic shores and the oak belt found to the south and west, along with the forests of New England became the important regions for British timber supplies.

In the Baltic region, the ports in Eastern Europe and Russia that were major timber exporting centres were Gottenburg, Oram, Christiania, St. Petersburg, Stettin, Dantzig, Memel and Riga (Albion, 1926). The first four ports were mainly exporting wood of fir trees; while the rest were sending a mixture of fir and oak to England. For the Scandinavian Peninsula, spruce spars and fir timber were exported from the ports of Longsund, Dram and Friedrikstad. In the export of wood, rivers and canals played a major role in transportation. Dantzig was served by the river Vistula which carried the oak logs from Galicia down to the port. Further east, the river Duma facilitated the movement of logs to the port of Riga. On the other hand, the construction of canals provided the opportunity for the

forests of Volhynia and the Ukraine to be harvested for their wood (Albion, 1929). At Memel, the river Niemen carried the fir from the plains of the Baltic provinces for export to England. The oak forests of Central Germany and Silesia were tapped by the ~~River~~ Oder which drained into the port of Stettin.

Translating to the level of the relations of production, a set of social relations emerged with this economic activity of exporting timber to England from the Baltic region. Because of an existing and elaborate social structure with nobles owning the land and peasants already living on these forested areas, foreign timber merchant houses and foreign naval timber agents such as the English, in conjunction with local merchants and local timber merchant houses, adapted the existing social division of labor to meet the needs for the production of wood.⁵ In cases where the

⁵ Along with the British, the French and especially the Dutch entrepreneurs were quite active in the purchase and export of timber from the Baltic regions (Albion, 1926; Latham, 1957). According to Bamford (1956:15), a *Compagnie du Nord* was formed by Minister Colbert in 1669 to buy and import naval stores from Norway and the Baltic North into France. Faced with Dutch competition, the French company, which was state-supported, failed in 1674. By 1739, French merchants were incurring severe losses due to tariffs imposed on them at Russian ports (Bamford, 1956:139). Towards the mid-18th century, both the French and the Dutch merchants' business activities were crippled by British merchants' commercial successes with the Russians. In fact, by this time, the French merchants were no longer actively operating in the Baltic and had contracted Dutch merchants to purchase their masts for them.

timber resource was located on crown land or communal land, appropriate arrangements (stumpage) were made with the state or village authorities for the harvesting of trees, and in return commissions were paid to the crown or village. Along such paths, the social relations of production of the Baltic region was reinforced and shaped, a consequence of the position of the Baltic region at this time period in the capitalist world-economy. The nobles and the crown, of course, benefited from these arrangements, along with their other economic activities of sending grain to the core zone. The local timber merchants who provided certain services benefited by the surge in the export of wood. Finally, the foreign timber merchants, such as the British who had set up their companies in the Baltic to invest in the production of wood, realized a healthy profit because of their control over most aspects of the trade, especially the final sale in Great Britain.

The procurement phase in Poland began with either the English timber house or local timber merchants negotiating with the owners of the forests who were mostly nobles. In Russia, however, with the ownership being distributed among the nobles, the crown and in some cases, villages, negotiation occurred with these three parties (Albion, 1926:143). It seems that the latter pattern of ownership happened to be the case also for Norway and Sweden (Latham,

1957:92). Financing was provided by banks in the cities of Dantzig, Riga or Warsaw. On most occasions, the merchant or timber house would contract for stumpage of a given area by making advances in cash or in provisions (Latham, 1957; Albion, 1926). For example, the level of remittances to the state authorities by an English timber house was approximately 55 kopecs per tree amounting to an annual sum of 50,000-60,000 roubles (Latham, 1957:104). If the contract was made with a noble, it was his responsibility to convey the timber to the port. This meant that the noble would ordinarily furnish the peasants living on his land to cut the trees. However, if the land was owned communally by a village, arrangements would be made with the elder or council of the village to provide manpower for the harvesting of the trees. If the trees were on crown lands, suitable arrangements would be made with the neighbouring villages for labor to cut the trees. Advances made on such occasions were usually one-third or one-half the amount the peasants expected to earn during the winter months. Such arrangements were made in early autumn before the peasants had to pay their taxes (Latham, 1957:93). This method of contracting for labor became more common with the abolition of serfdom in Eastern Europe (Albion, 1926:142). The pattern of negotiating for cutting trees appears to have been the same in Norway and Sweden where the merchants would undertake to

pay for the taxes of the peasants and deduct these cash advances at the end of the production phase (Latham, 1957:93). Along with such an arrangement for the provision of cutters, the peasants or village would provide their own axes, sledges, and horses for the production process. It is estimated that one village could provide approximately 200 to 300 horses for such an enterprise.

The production phase began in November of each year when the peasants with their horses travelled into the forests for the cut. For each operation, usually 200-300 male adults from a village would be involved: The cutting, according to Albion (1926:143), was based on a plan whereby timber of a proper size was chopped, culled and removed. Transporting the logs to the streams was undertaken by horse-drawn sledges. Subsequently, the logs were floated downstream where they were assembled onto rafts for the trip to the port. These rafts often consisted of over a thousand logs which would be cut into respective requirements in the saw mills set up by the English timber and local merchant houses. Not only were these sawmills cutting timber; they were also capable of grinding corn (Latham, 1957:86). Competition was prevalent between the English timber houses and native ones for the timber trade. However, the English had an added advantage. They had control of the sale of the wood in England. On most occasions, these firms, such as

Thornton, Pierson and Morison at Riga, Solly at Dantzic, Moir at Memel, Tooke at St. Petersburg and Norman at Norway, had a ready market due to their contracts with the English Navy Board for the supply of timber and naval stores (Alpion, 1926:150). In Scandinavia, the firms of Dickson and Company, Churchill and Sim, and Foy, Morgan and Company were also very active in the setting up of sawmills (Latham, 1957:94). By the 18th century, British timber concerns, such as the Onega Timber Company, were setting up sawmills of steam and water-drawn on the banks of the river Onega in Russia (Latham, 1957:104-105). Their activities were facilitated as well by trade agreements between England and Russia in 1734 and 1766. Through these agreements, the English were granted identical privileges as local merchants in Russia which led the native Riga merchants to lose their monopoly of the mast trade. In fact, foreign buyers would commission British merchants to handle their purchases.

The next phase of the production process was the transportation of the wood products to the point of consumption (realization). The timber and wood products were transferred onto waiting timber ships at the previously mentioned timber ports for shipment to Great Britain. The length of the voyage varied from three days sailing from the port of Fredrikstad to a week for timber ships departing from Stettin, Dantzic, Memel, Riga, and St. Petersburg

(Albion, 1926:150). The volume of tonnage required to transport these wood products was enormous. For example, every hundred deals (120 boards) required four tons of shipping and 5 to 16 tons were required to carry a small or a large mast, respectively (Carroll, 1973:19). Albion (1926: 150) estimated that an average timber ship could carry approximately 300 loads (1 load = 50 cubic feet) of timber. Throughout the first half of the 17th century, these loads of timber were carried by either Dutch or English vessels (Wallerstein, 1980(a):52). With the Dutch involvement in the Thirty Years War and the English Navigation Acts of 1651 and 1660, English ships were employed increasingly in the carrying trade (Carroll, 1973:19). However, the amount of vessels that the English shipbuilding industry could provide was limited.⁶ England compensated for this by the confiscation of Dutch ships through English sea victories and formal purchases (Carroll, 1973:19). According to Carroll (1973: 19), for every one vessel built in England, four ships were bought abroad. Furthermore, merchant fleets of Norway and Sweden were active in the carrying trade toward the end of the 17th century (Carroll, 1973:19).

⁶ Wallerstein, (1980(a):55) has listed a series of cost advantages which the Dutch had over the British in shipbuilding: skill of Dutch shipwrights, economy in the use of materials, labor saving devices, large scale purchasing of material and cheap transportation of construction materials.

Because of the bulkiness of the cargo and the shipping tonnage required for transportation, freight rates varied and were naturally a major portion of the sale price of the wood products. For example, the freight rate for a load of timber from Norway was 12 shillings in comparison to 25 shillings for a load coming from St. Petersburg (Albion, 1926:151). At times of war, this cost shot upwards because of the required convoy protection. It seems that over two-thirds of the sale price of wood products was made up of freight and incidental charges, such as Sound dues and duties (Albion, 1926:152). For a tree costing 5 shillings in terms of purchase price in Poland would have added onto it by the time it reached the port of Dantzic an extra £1 and when it finally arrived in Britain it would cost £5 5s.⁷ With all the extra charges, the timber carrying trade can be seen as a very lucrative enterprise - a sector of the English economy which became a major concern for English shipowners in the early 19th century. Furthermore, if we should enquire about the extent of profits made by the merchants and the timber houses, we would find that the amounts

⁷ A moment's reflection would make us realize then why it was so important for the British economy and British shipping magnates to secure the freight-carrying trade. The lucrativeness of this freight-carrying economic activity could account for part of the basis of the passage of the Navigation Acts of 1651 and 1660.

varied from one source to another. For Albion (1926:152), it ranged from 5% to 10% overall, whereas for Latham (1957: 104) it was about 33% for a British timber firm operating in Russia at the turn of the 18th century.

Within this overall process of the search and the import of timber into Great Britain in the mid-17th and early 18th centuries, the British State also played a significant role. In the previous pages, we have hinted at its functions. Besides the provision of convoys to protect timber ships so as to ensure that the continuous supply of wood to Britain was not interrupted, the British Government was quite active in securing privileges for the merchants and entrepreneurs domiciled in the British Isles. One of the most significant steps that the British Government took was the negotiation of bilateral trading arrangements with Russia in the years of 1734 and 1766. Such state overtures safeguarded the trading privileges of British merchant and timber houses operating in Russia, and to a certain extent eliminated other foreign agents from competing with the British (Bamford, 1950:141-142). Further to such political trading accord, the other important act undertaken by the British Government was to legislate the protection and ownership of timber found on crown lands in its colonies⁸

⁸ In a parallel fashion, the French Government was quite active in legislating the protection of timber resources through the *Ordonnance* (See Bamford, 1956:10-29).

in order to ensure a constant supply, in addition to the bounties and preferences it awarded to timber firms to carry out logging operations. Even as early as 1722, the British Government had ensured ownership by a legislative act prohibiting the clearance of white pine trees by settlers in its colony of Canada (Latham, 1957:131). By 1763, after the conquest of New France, legislation and instructions were included in a dispatch to General Murray, Military Commander of New France from the British Government (December 17th, 1763), ordering him to reserve:

"Land in each township for the growth and protection of naval timber if there are any woodlands, fit for that purpose. And since "the country in the neighbourhood of Lake Champlain and between Lake Champlain and the River St. Lawrence abounds with woods, producing trees fit for masting for our Royal Navy and other useful and necessary timber for our navy constructions, you are therefore expressly directed and required to cause such parts of the said country or any other that shall appear on survey to abound with such trees and shall be convenient to water carriage, to be reserved to us and to use your utmost endeavour to prevent any waste being committed upon the said tracts by punishing in due course of law any persons who shall cut down or destroy any trees therein...."

(quoted in Whitton, 1974:4-5)

Within such an ambit of political consideration, the activity of the production and sale of wood continued unabated in the Baltic region and in Great Britain. This economic process, however, did not continue uninterrupted in a crisis-free atmosphere. It was punctuated by interstate rivalry leading to challenge to the Dutch hegemony of the European world-economy - an issue to which we now turn.

3.3 HEGEMONIC RIVALRY AND THE SHIFT OF PRODUCTION LOCATION

According to Wallerstein (1980(a):39), Dutch hegemony of the European world-economy lasted from 1625 to 1675. However, by 1651, this supremacy of the Dutch was being challenged from both sides of the English Channel: France and England. The quest for the hegemonic position in the world-economy was played out in a series of interstate wars, and the struggle between France and England for such a supreme position lasted almost one hundred years. By 1763, it was clear that the English had won the competition (Wallerstein, 1980(a):71, 246).

During the ascent, England had to engage in several violent campaigns with Holland and later France. It was throughout the course of these armed conflicts that the 'pipeline' of timber from the Baltic Region came under severe pressures. In 1651, a situation of this nature emerged with the signing of a treaty between Denmark and Holland. In the *entente*, Holland was given the rights to collect the tolls at the Sound in exchange for £35,000 a year and, as well, the legal sanction to close down the Sound in times of war (Albion, 1926:153). In the first Anglo-Dutch Wars of 1652-1654, the Dutch enforced such rights and closed the Sound with the seizure of English vessels and ships flying neutral flags. Acts of this nature engendered a perilous atmosphere surrounding timber supply

and caused grave concern within English timber houses and the Naval Board. The danger of English timber operations and supply in the Baltic being disrupted was prevented by placing essential timber shipments under convoy protection. Moreover, the Royal Navy was ordered to sail into the Sound and the Baltic Sea to keep the sea lanes open for English merchant marine.⁹

Between 1654 and 1814, there were 20 occasions wherein the Royal Navy was dispatched into the Baltic Sea (Albion, 1926:153). The vigorous 'showing of the Union Jack' reflected the gravity of the situation and underscored England's overall dependency on the Baltic region to satisfy its wood consumption. Particularly in the sphere of shipbuilding and repairs, there was a great need for Baltic masts and spars. For instance, after April 17, 1686, every English warship was fitted with Baltic wood on most of its structure below the waterline (Albion, 1926:11). Therefore, it was crucial for this supply of wood to be maintained if England was to compete with Holland and France for imperial supremacy, because for such an ascent it was necessary for

⁹ Compare this with the 1st, 6th, and 7th Fleets of the United States Navy in keeping the sea lanes open for tankers carrying crude oil from the Middle East, parts of Asia and South America to the United States in the late 20th century.

England to have a strong navy.¹⁰ Witness the increase in tonnage of the Royal Navy which grew from 100,000 tons in 1685 to 325,000 tons in 1760 (Hobsbawn, 1968:50). Students of seapower, such as Albion (1926) and Bamford (1956), have argued consistently that England's rise to dominant power status in the 19th century was made possible by its mastery of the high seas. Listen to the way Albion (1926:3) expresses this:

"Those "wooden walls" [ships] not only formed the nation's first line of defense but, by crushing similar ships of the line from Holland, France, and Spain, had won for England her mastery of the seas and had contributed to her dominant position in the world."

Wallerstein (1980(a):249) spells this out in another fashion. For him (1980(a):249), "... control of the seas in the capitalist world-economy has consistently been the "central link [in] the chain of exchange by which wealth accumulates."" Hence, it was not only necessary for England to ensure that Baltic wood supplies remained open, but, as well, to expand into new areas of the world-economy for such resources. The English colonies in North America were seen to have such a potential.

¹⁰ Britain's reliance on wood for its naval ships stopped after the Battle of Hampton Roads in 1862, when iron definitely replaced wood as the material in naval architecture (Albion, 1926:ix).

In 1696, England, according to Wallerstein (1980(a): 241), created the Board of Trade and Plantations. By 1705, this Board had passed the Naval Stores Act which provided bounties and preferences to stimulate production of timber in the English colonies of British America. It was done, as Wallerstein (1980(a):241) has argued, to release England from its overall dependency on imported Baltic wood, especially wood from Sweden, as by this time over 48% of British wood imports were from this country in the Baltic. In the New England colonies, lumbering had started as early as the 17th century. But because of the lack of labor available, the high freight charges to England, and the high cost of wages, it did not enlarge into a very extensive industry. Throughout this period, most of the wood produced was shipped to the Caribbean and Newfoundland, though a small amount of masts and spars were exported to England (Carroll, 1973). The British Naval Board reported that, after the mid-17th century, masts from the forests of New England were imported into Great Britain (Albion, 1926:31). This was to change in the later parts of the century and the beginning of the 18th century. Wallerstein (1980(a):241) has brought to our attention that at the turn of the 18th century, English migration to British North America was opened to non-Englishmen, such as the Scots and the Irish. Such migrants, it was hoped, would provide the necessary labor

force for a timber industry, and thus, not only enhance England's economic advantage, but as well, its military advantage. It led not only to an expansion of wood production, but also a shipbuilding industry. By 1775, it is estimated that nearly a third of all registered British ships were manufactured in the English colonies of British America. For instance, between 1678 and 1714, the merchants of Great Britain bought ships built in New England to a total of 20,601 tons (Carroll, 1973:133). Such supplies of wood products from New England to Great Britain came to a halt with the American War of Independence. The forests of New Hampshire, Massachusetts and Maine ceased to be a resource base for Britain's needs (Albion, 1926:11; Lower, 1973:42). In 1779, the Massachusetts Legislature passed an act forbidding the exports of masts and spars to England (Albion, 1926:233). Because of this situation, England became increasingly reliant on its northern colonies in North America, such as Nova Scotia and New Brunswick, to satisfy her requirements for wood products (Wynn, 1974; Lower, 1973).¹¹ Nevertheless, such initial impetus did not wholly engender a rapid expansion in timber and lumber

¹¹ According to Lower (1973:42), by 1729 there were some lumbering operations in early Canada. But they were on a very small scale producing wood for the local market or for shipping to the West Indies. The mills were small in size costing approximately £100 - £200 by 1785.

operations in early Canada. The reasons for this are as follows: production costs such as wages were higher in early Canada than the Baltic regions; distance from North America to the markets in Great Britain was longer and thus freight charges were higher; and the bulky nature of the wood products hindered the available carrying capacity of timber ships to and from Great Britain.

These initial barriers to further growth of timber production in early Canada were transcended in the later parts of the 18th century. The continuous interstate hostilities in Europe provided conditions for later expansion of timber operations in British North America. By 1672, after a series of wars between England, France and Holland, the rivalry between these powers shifted to England and France turning on each other and leaving Holland waiting in the 'wings'. Even though Holland was still a formidable economic power, "the Dutch suddenly became a secondary factor" (Wallerstein, 1980(a):80). From then on, it became a question of which state would assume the position which Holland enjoyed in the mid-17th century. In Wallerstein's view (1980(a):246), the contest ended by 1763 with England's victory over France. However, as he has further added, France was not ready to admit this triumph on England's part until 1815 (Wallerstein, 1980(a):246). It is this latter period between 1763-1815 that we believe provided the

conditions for the expansion of the wood industry in British North America.

Between 1793 and 1815, we find England and France once again embroiled in conflict. During the years of 1793 and 1802, British supply of timber for its industrial needs was guaranteed by utilizing tariff protection for colonial wood. This preferential treatment was a consequence of British capital interests which had convinced the State that actions had to be taken against Baltic supplies before investments could be made in British North America (Hughson, 1964:7). The flow of colonial wood was maintained by more state contracts being awarded to private firms assuring them of profits (Lower, 1973). Such measures provided additional companies with the opportunities to invest in British North America, thus structuring the conditions of the timber trade and British capital interests in furthering the development of timber and lumber operations. As Lower (1973:41) concludes, such firms "entered into a general trade in timber and began to angle for added protection against Baltic timber". These firms declared that England was in a desperate need for timber and Canada, with its bountiful forests, held an unlimited supply. It was argued by these timber concerns that in order for them to make any investments in early Canada, it was necessary to develop timber operations to the same extent as those in the Baltic region. And to do this,

it would mean large capital investments which they were not willing to make, in case Great Britain should revert back to Baltic suppliers after the armed conflict (Albion, 1926: 355). To this end, tariffs on foreign wood had to be imposed and institutionalized so as to offset the freight charges colonial wood had to bear, which in the past had made it less competitive in the British markets. Such presentations on the part of these timber firms, along with the growing depletion of timber in the dockyards of England by 1803, moved the issue of tariffs on foreign wood from the 'back burner'. The solution by the British Government was to impose an increase of tariffs by 2½ times in 1805 over the rate prevalent in 1795.

The significant turning point which further spurred the expansion of timber operations in British North America came in the renewal of conflict (the Napoleonic Wars) between Great Britain and France in 1803 after the Peace of Amiens. By 1804, the timber supply of England was being reduced to a trickle following the advance of Napoleon's army in Europe (Albion, 1926:33). England needed the essential wood products not only for its industries, but, as well, for its navy. Albion (1926:111) has commented that throughout the period of the war the Royal Navy could only rely on about 4,000 loads of wood from England's forests which amounted to approximately one-tenth of its total

needs. Drastic measures were taken such as employing French agents to purchase Baltic masts. The condition worsened in the ensuing years. In 1806, Napoleon issued the famous Berlin Decree culminating in the Continental Blockade which closed virtually all Baltic and European ports to British shipping and exports. In July 1807, Napoleon, at Tilsit, secured the agreement of Russia, Prussia and Denmark to his proposals of a blockade (Albion, 1926). Furthermore, later in the year, France declared that any neutral ships suspected of ferrying goods to and from England would be liable for seizure. As a consequence, British imports of Baltic wood fell in 1808 to 25,000 loads from an average of 200,000 loads for previous years (Lower, 1973:49). Of course, not all countries strongly enforced the Napoleonic decrees. Sweden, for example, continued to send wood to Great Britain until 1809, when she was forced into the Continental System after her defeat by Russia.

Of course, the attempt to seal off England from the Baltic and European trade was not totally successful. In the case of the British timber houses, the resort was to employ foreign nationals to contract for timber supplies and to ship the purchases in vessels flying neutral flags. But the blockade did have an effect of constricting the supply of wood to England. This led to the cost of wood rising with the increased charges in freight. For example, the

freight from Riga which was normally 7 shillings 4 pence a load spiralled to 25 shillings 4 pence by 1807 (Albion, 1926:338). Such an increase of freight charges and a constriction of supply of wood drove up prices. Between 1792 and 1809, the cost of a load of Memel fir timber in Britain increased from £2 4s in 1792, to £4 11s 6d in 1807, to £16 in 1809 (Lower, 1973:56-57).

With this trend of price increases, the shipbuilding and construction industry in Britain suffered. As a result of the blockade, firms involved in the Baltic timber trade were encountering severe difficulties in pursuing their business activities. This meant a new geo-political region had to be developed fully in order for these firms to continue operating. But these sectors were not the only ones affected. With the Continental Blockade, British shipping interests were denied the freight carrying trade to the Baltic and European ports. Thus the lucrativeness of this carrying trade was in jeopardy and such a situation exposed this segment of the bourgeoisie to serious economic difficulties. Along with the already mentioned British timber interests which had started operations in British North America, and those involved in the Baltic timber trade, we find increasing measures on the part of the shipping interests to lobby the state for protective tariffs against foreign wood in the hope of enhancing the wood industry in

colonial British North America (Lower, 1928:150; Hughson, 1964:7). To the shipowners, a blossoming of the timber and lumber industry would in turn stimulate the carrying trade and thus satisfy their own economic interests. The magnitude of such an operation was to be impressive. For instance, by 1818, transferring the wood trade to North America involved close to 300,000 tons of British shipping and 15,000 sailors (Lower, 1973). These political maneuverings and the critical economic conditions in Great Britain led to the imposition of a higher duty by the British Government in 1810 on foreign wood entering Britain, while at the same time preferential treatment was given to colonial wood. Thus, by 1810, the tariff on foreign timber and lumber was $3\frac{1}{2}$ times that of 1795 (Hughson, 1964:7). By 1814, the tariff rose to $6\frac{1}{2}$ times to what it was in 1795 (Hughson, 1964:7). In British North America, these developments led to a further inflow of capitalist timber firms into Quebec, Nova Scotia and New Brunswick (Ouellet, 1980 (a):196; Whitton, 1974). Capital was invested in timber and lumber operations, ship construction and naval contract operations. This series of investments led to an increase of timber and lumber exports. We find such gains in the British market for wood products from Canada in the evidence given by James Hume, British Board of Trade, to the **Select Committee on Timber Duties** of the British House of Commons

(1835:4). Hume outlined that for the first fifteen years up to 1802, 99% of imports of timber into Great Britain came from the Baltic with 1% from the colonies. From 1803 to 1807, timber imports into Great Britain were 6% for colonial wood with the rest coming from the Baltic. Between 1808 and 1812, timber imports rose to 62% for colonial products leaving 38% from the Baltic region. The peak was reached between the years of 1829 to 1833 when colonial timber imports were 76% in relation to 24% of Baltic imports. Reviewing this in terms of volume of colonial wood (Table 3.1) between the years 1788-1833, Latham¹² (1957:48) reports:

Table 3.1
Volume of Wood Entering Great Britain 1788-1833

	From Baltic Standards	From B.N.A. Colonies Standards	Total Standards
1788-1792	73,132	866	73,988
1793-1797	54,866	408	55,274
1798-1802	59,336	972	60,308
1803-1807	77,392	5,511	82,903
1808-1812	24,572	40,179	64,751
1813-1818	41,951	49,199	91,150
1819-1823	38,866	111,851	150,717
1824-1828	63,963	136,967	200,930
1829-1833	40,927	134,227	1,751,154

¹² Latham's statistics for the volume of wood are given in standards. According to Lower (1973:252), there is a difference between one standard in Quebec to that of the Baltic region. 1 Quebec standard = 230 cu. ft. or 2,760 board feet. 1 St. Petersburg standard = 165 cu. ft. or 1,980 board feet.

Within these social-historical conditions, we find the expansion and shift of timber production to early Canada. But such a transfer of financial investments could only be fruitful if this region of the world-economy, i.e., early Canada, had the necessary prerequisites for expansion of timber production processes. Two of the 'holy trinity' of variables of capitalist accumulation, i.e., capital and land (filled with resources), were available or within grasp in early Canada. However, the third of this triumvirate, labor, was more scarce. As we will see, this was relieved by the wide scale migrating flows of displaced people from Great Britain to early Canada in the 19th century.

3.4 LABOR FORCE FORMATION IN A REGION OF THE CAPITALIST WORLD-ECONOMY: THE CASE OF EARLY CANADA

It is common knowledge that besides natural increases, the growth of the labor force in early Canada was facilitated to a significant extent by the waves of immigrants, especially those from Great Britain and Ireland in the 19th century. This migratory flow of people to early Canada can be related to the dynamics of the European world-economy, specifically the processes of capitalist accumulation and development in the British Isles. Therefore, rather than viewing this movement of people as an external process between two units, we would like instead to perceive these

migrations as part of the internal dynamics of the capitalist world-system.

As historical events, the waves of migrants to early Canada in the 19th century were the consequence of long term transformations in the British Isles. These wide-scale migratory flows were brought to the surface as a result of the changes and shifts in the social and economic structures of Great Britain and Ireland. The dynamics of these transformations can be delineated into two main tendencies: the processes of capitalist accumulation in England, and the core-peripheral relations, or in Hechter's (1975) words, "internal colonialism", existing between England and its internal periphery, i.e. Scotland, Ireland, and Wales.

Recent studies of the demographic pattern of England, utilizing back projection techniques,¹³ have offered us a rather detailed account of the growth of the English population since the 16th century (see Schofield and Wrigley, 1981). Inspecting closely the population curve of England during the 16th and 17th centuries, we find that the population grew quite constantly from the mid-sixteenth century to the beginning of the 17th century (Schofield and Wrigley, 1981:207). In fact, examining Table 3.2 we notice

¹³ Like all types of analysis, back projection has a certain level of error (See Schofield & Wrigley, 1981 for the discussion).

Table 3.2

English Population Totals 1546-1871

Year	Total	Percentage Increase Since Last Total
1546	2,853,711	2.88
1551	3,011,030	5.51
1556	3,158,664	4.90
1561	2,984,576	-5.51
1566	3,128,279	4.81
1571	3,270,903	4.56
1576	3,412,722	4.34
1581	3,597,670	5.42
1586	3,805,841	5.79
1591	3,899,190	2.45
1596	4,011,563	2.88
1601	4,109,981	2.45
1606	4,253,325	3.49
1611	4,416,351	3.83
1616	4,509,865	2.12
1621	4,692,975	4.06
1626	4,719,684	0.57
1631	4,892,580	3.66
1636	5,058,102	3.38
1641	5,091,725	0.66
1646	5,176,571	1.67
1651	5,228,481	1.00
1656	5,281,347	1.01
1661	5,140,743	-2.66
1666	5,067,047	-1.43
1671	4,982,687	-1.66
1676	5,003,488	0.42
1681	4,930,385	-1.46
1686	4,864,762	-1.33
1691	4,930,502	1.35
1696	4,961,692	0.63
1701	5,057,790	1.94
1706	5,182,007	2.46
1711	5,230,371	0.93
1716	5,275,978	0.87
1721	5,350,465	1.41
1726	5,449,957	1.86
1731	5,263,374	-3.42
1736	5,450,392	3.55
1741	5,576,197	2.31
1746	5,634,781	1.05
1751	5,772,415	2.44
1756	5,993,415	3.83
1761	6,146,857	2.56

Table 3.2 (Cont'd)

English Population Totals 1546-1871

Year	Total	Percentage Increase Since Last Total
1766	6,277,076	2.12
1771	6,447,813	2.72
1776	6,740,370	4.54
1781	7,042,140	4.48
1786	7,289,039	3.51
1791	7,739,889	6.19
1796	8,198,445	5.92
1801	8,664,490	5.68
1806	9,267,570	6.96
1811	9,885,690	6.67
1816	10,651,629	7.75
1821	11,491,850	7.89
1826	12,410,995	8.00
1831	13,283,882	7.03
1836	14,105,979	6.19
1841	14,970,372	6.13
1846	15,933,803	6.44
1851	16,736,084	5.04
1856	17,763,920	6.14
1861	18,937,536	6.61
1866	20,166,624	6.49
1871	21,500,720	6.62

(Source: Schofield & Wrigley, 1981:207-215)

that between 1546 and 1611 the number of people in England grew from 2,853,711 to 4,416,351. With the exception of the year 1561, when there was negative growth, the population of England continued to increase quite substantially until 1636 (other than the year 1626). After this period, the population growth began to slow down until 1656 and in fact decreased for the years 1661 to 1686. By 1691, there was a gentle rise, but this growth remained quite slow until the mid-18th century when we find a further surge in the curve projecting a population of 16,736,084 a century later in

1851.¹⁴ It is these ~~later~~ ^{later} surges at the end of the 18th century which provided the 'warm bodies' for the immigrant ships leaving for British North America in the 19th century. But how does this displacement of English population arise which consequently lead to outmigration from their places of abode? We seek the explanation for this in the socio-economic conditions of the British Isles, a consequence of the dynamics of the two tendencies which we have outlined previously.

England in the late 18th century was a country in a rapid phase of industrialization. With a growing manufacturing sector and trade, tonnage for the port of London increased from 135,000 tons in 1694 to 796,000 tons by 1800 (Lower, 1973:5). English imports had grown from £4,608,000 in 1698 to £30,571,000 in 1800 (Lower, 1973:5). In the agricultural sector, between 1760 and 1830, agrarian development was pushing towards large scale formation of the capitalist farmer-entrepreneur with a growing pool of agrarian wage labor (Hobsbawm, 1961:17). This development

¹⁴ It is interesting to note that the population curve of England correlates quite nicely with the waves (the logistic) of the expansion and contraction of the capitalist world-economy. For the expansion of the 16th century, we find a growth in the English population, and a stagnation in the population's growth for the downturn in the world-economy during the 17th century. This is followed by a surge in the growth of the population in the mid-18th century expansionary phase of the world-economy.

meant a very concentrated form of land ownership whereby, according to Hobsbawm (1961:150), four thousand proprietors owned four-sevenths of the land cultivated by a quarter of a million farmers employing one and a quarter million hired laborers. How did this come about? Prior to this, between 1650 and 1750, the social ladder was hierarchically more complex. It was distinguished by landlords at the top rung who were often nobles receiving rental payments. Next down this social 'landed' ladder were the yeomen farmers, often tenants, who worked on large farms and hired laborers. At the bottom end of the rungs of this ladder were the two main groups of people: the small farmers, still considered as yeomen, with their smaller plots of land, and the landless laborers (Wallerstein, 1980(a):85). By comparing this social structure with that of the late 18th century, certain displacement of people has occurred: the small farmers have been pushed and turned into hired laborers.¹⁵

¹⁵ According to Mingay (1968:51) however, the decline of the small farmers occurred much earlier before 1760. "... Modern understanding of the slow pace of the 'agricultural revolution' and of the effects of parliamentary enclosures does not, in general, support the old view that a major decline of small farmers occurred between 1760 and 1830. The land tax evidence, indeed, shows that the numbers of small owners tended to rise for much of this period. Some engrossing of farms occurred, but it was limited by the practical difficulties of displacing small farms in large numbers. The major decline of small owners and of small farmers in general must have occurred before 1760, probably between about 1660 and 1750."

Scholars, such as Hobsbawn (1961, 1968, 1977) and E.P. Thompson (1968), have suggested that one of the causes for this displacement of people was the consequence of the series of enclosure movements between 1760-1830 which swept away all the small farmers (holders) and turned them into wage laborers, paupers and vagabonds.¹⁶ The attempts to enclose open fields had a material-economic origin. Rising prices of wheat throughout the period until 1815 stimulated high production levels. The constant need of grain and wool of an expansionary European world-economy sustained the need for increased production. To meet such levels of production and profit, agricultural efficiency had to be maintained or increased. Small pieces of land worked upon by small tenant farmers, squatters and cottagers lay in the way. The route available to overcome this difficulty was to enclose these lands, as well as those which were open fields.

Enclosure meant, therefore, a systematic rearrangement of common or open fields into private cultivable or arable land units. In England, from 1760 onwards, landlords exploited this legal institution of enclosing land (through

¹⁶ It must be realized that this was not the only period when the move to enclose common or open fields took place. For instance, enclosure movements occurred between 1485-1640, and throughout the 18th century. Enclosure thus was a continued process since the Middle Ages, except that it peaked on certain occasions.

property definition) by converting uncultivated or cultivated open or common fields into private cultivated land or pasture (Hobsbawm, 1968:106; Thompson, 1968:238). Nine hundred Acts of Enclosure were promoted between 1760 and 1770 and close to 2,000 Acts of Enclosure were arranged by landowners between 1793 and 1815 (Chambers and Mingay, 1966:77). Initially, the movement for this period was largely local in nature, but it became widespread nationally after 1801.¹⁷ Open fields extending along Yorkshire, Lincolnshire and Norfolk coasts and stretching to Dorset were enclosed. Between the years 1760 and 1820, close to 40% of Bedfordshire and Rutland, about 50% of Huntingdonshire, Leicester and Northampton, 25% of Berkshire, Buckingham, Middlesex, Norfolk, Nottingham, Warwick and Wiltshire, and over 33% of Lincolnshire, Oxford and Yorkshire were enclosed (Hobsbawm, 1968:107). Arthur Johnson (1963:90) spells this in more explicit detail of the acreage enclosed:

Table 3.3

Enclosure of Land in England 1761-1845

	Common Fields Acres	Waste Acres
1761-1801	2,428,721	752,150
1802-1844	1,610,302	939,043
1845 and after	187,321	334,906

¹⁷ It might be interesting to note that the enclosure movement was over by 1876 (Johnson, 1963).

The widespread move to enclose land by the landowners and large farmers meant severe economic hardship for the small farmers.¹⁸ Through enclosures, the small farmers either had to pay exorbitant rents to stay on their farms or lose them. With the slowly depleting availability of common fields, the small farmer lost his rights after the harvests to turn his cattle into the fields for the hay or corn stubbles. As well, he had no other area to quarter his animals when it came time to cultivate his small plot of land. Moreover, rights to firewood and building materials which he had obtained in the past from open fields were lost. A contemporary of the times reflecting on these transformations utters: "strip the small farms of the benefit of the commons and they are all levelled at one stroke to the ground" (Johnson, 1963:100).

Notwithstanding these acts of enclosure propelling the displacement of the small farmer, a further cause which exacerbated this condition can be sought in the concentration and consolidation of farms (Hobsbawm, 1968:102-103).

¹⁸ By small tenant farmer, we are referring to small farmers, cottagers and squatters. Acreage size of these farms would be 30 acres or less. We clumped them together because we believe that the effects of the enclosures were felt by these groups. With the exception of some small tenant farmers, the rest suffered the loss of rights to common or open fields after the enclosure movement of the late 18th and early 19th centuries (See Chambers and Mingay, 1966:97).

Consolidation thus meant a higher agricultural efficiency, which produced greater crop yields leading to higher profits. Thus, between the scylla of enclosures and the charbydis of the concentration of farms, the only route available for the small tenant farmers was wage labor on the farms or in the cities.

In England, the condition of these wage laborers, especially the farm workers, slowly deteriorated in the 1790's. The gradual adoption of the threshing machine did not in whatsoever manner help the employment situation. By now, agrarian workers were hired either weekly or daily and were released when there was not enough work around. The intermittent hirings and the increasing amount of paupers and unemployed led to disparate conditions, especially in parts of southern and eastern England (Hobsbawm, 1968:105; Hill, 1977:64-65). The distress led to the adoption of the Speenhamland System in 1795 (in addition to the Poor Law of 1782) which was originally developed as a local measure. What the system provided was a subsidization to a laborer's wage, fixed according to the price of bread, should the farmer fail to pay the sufficient wage determined for subsistence locally (Hill, 1977:65). The System encouraged the large farmers either to keep the wages low or even to lower them. Thus it further demoralized the workers and riots and revolts followed. Moreover, the existence of the

System required heavy taxation to pay for the subsidization. The rates of the Speenhamland System rose from £2 million in the 1780's to £6 million by 1815. What this meant was further taxation on the remaining tenant farmers which they could ill afford (Chambers and Mingay, 1966:77-105). It led to more impoverishment and displacement of people. Aggravating the condition further was the rise of rents in areas of recent enclosure. Such rises were met to an extent by some small farmers who had been able to retain their rights to farm via the profitability of the sale of their grain. However, when the prices fell in 1815-1816, it resulted in the ruin of these farmers (Thompson, 1968: 241).¹⁹ Throughout this period, therefore, we witness the increases in the roll of unemployed wage laborers.

Conditions for these wage laborers were poor. Poverty ran rampant, with paupers and vagabonds on the rise. Examining some indicators of the living conditions, Hobsbawm (1957:52-54) indicated that mortality rates increased from 1810 to the 1840's, meat and tea consumption was down, high

¹⁹ According to Chambers and Mingay (1966:96), these farmers' costs per unit output were higher than those of large farmers, partly because "they paid a higher rent per acre and bore a relatively higher burden of poor rates, and partly because they lacked the economies of scale, the technical efficiency, capital resources and flexibility which helped the larger farmers." Therefore, when prices fell, this led to their demise.

unemployment existed in areas of England and farm laborers ate 30% less crude weight than the paupers. In the cities, the industrial wage workers fared just as badly. In a downturn in the world-economy, between 1815-1850, these workers suffered. With the return of the disbanded soldiers after the Napoleonic Wars, the influx swelled the ranks of the unemployed and added pressure to the social services. Under such constant pressure of rising unemployment in the industrial and rural areas and the widespread poverty among the laborers, social legislations were enacted to alleviate these conditions.

The New Poor Law of 1834 gave relief to these workers and the paupers. But, the new legislation had a drawback; it withdrew the parish guarantee of a minimum livelihood (Hobsbawm, 1961:167). With the passage of the Law, the unemployed were housed in new workhouses and labored on odd days or half days. For those where no relief was available, migration to the cities or overseas was the only resort. In fact, the Poor Law Commissioners recommended emigration for the surplus labor in 1834 (Redford, 1976:83). To this extent, the Amendment Act of 1834 gave the local parishes of England the opportunity in assisting emigration (Carrier and Jeffrey, 1953:30). By the 1840's, several counties were already on the verge of an absolute loss of population. The migration to the urban areas

provided no relief, as from 1837 onwards there were reports of severe duress in the manufacturing districts, especially in Lancashire. Wages fell for weavers from 2s 11d in 1839 to 2s 1d in 1842 (Redford, 1976:124). Thus the only recourse left was emigration overseas.

Overseas migration of this period when examined unreflectingly can be accounted for by the catastrophic events present in England at this time. On our part, we have tried to explain it by tracing the historical socio-economic conditions which gave its 'birth'. The growth of capitalism in England, along with the enclosure acts to foster and continue capitalist development, and the rise in the population of England in the eighteenth century precipitated, in our view, the widescale movement of people overseas.

If these were the conditions in England, one might ask: how was England's 'internal periphery' faring? Locked in a political incorporation, the economies of Wales, Scotland, and Ireland developed and specialized in reaction to the needs and markets of England. Industrialization in these places complemented those of England's, and in cases where the indigenous industries were providing competition, systematic tariffs and acts were passed by the English Parliament to thwart such challenges. Within such an ambit of political and economic leeway, the economies of Wales, Scotland and Ireland developed and suffered.

Wales, for example, concentrated in certain crops and livestock for export to the English markets. The bountiful profits derived from such economic specialization by the landlords led to further land enclosures which had in the past, between 1540-1640, systematically displaced the population. The further encroachment on the commons' rights led to the displacement of people in the lowlands and a concomitant increase of vagabondage. In the Highlands, where the population was not as dense, those that were displaced could still eke out a living. But on the whole, it meant migration to growth areas in England or overseas.

The economy of Scotland suffered the same fate. Union with England in 1707 severed Scottish economic ties with other European markets which it had before (Hechter, 1975:85). It led to the economy of Scotland being developed to fuel the needs of England. Cattle production was expanded with an increase as well in the production of wool for export to England. Price increases between 1740-1790 for beef and wool further encouraged the Scottish Lairds to start encroaching on their tenant farmers. As a result, what was happening in England and Wales was repeated. Migration occurred with people moving from the Highland areas to the lowland farms and cities, or overseas. These were mainly small dispossessed peasants, whereas the emigration that occurred in the lowland areas were mainly weavers,

hatters and craftsmen, who were displaced by unemployment and rising rents (Flinn, 1972:452). The extent of such out migration (see Table 3.4) is reflected in an estimate of the rate of migration of two highland parishes. These migratory outflows in the long run depleted Scotland's population and reduced its contribution to the overall population levels of Great Britain by the early 20th century (1931). By then, Scotland's population as a proportion of total British population was only 10.8%, in comparison to 15.4% a century earlier in 1801 (Flinn, 1977:241).

The tragedy of population loss as a result of enclosures and core-periphery relations leading to 'dependent' economic development is repeated again in Ireland. Like Scotland and Wales, the economy of Ireland concentrated on a few selected areas to supply the markets of England. Cattle and grain were the major products exported to the English markets. However, the level of exports was conditioned by the presence or absence of tariff acts. The Great Cattle Act of 1666 excluded Irish cattle from the English markets (Wallerstein, 1980(a):263). Lifted in 1758 and reintroduced eighteen years later, the Act initially forced the Irish to develop their wool and grain products. However, through systematic protectionist measures, the English introduced several acts which excluded Irish woollen products (1699), coloured linens (1699), and glass (1746) from the English

Table 3.4
 Estimate of Outmigration
 From two Highland and Hebridean Parishes
 1801-1901

Year	Estimated Net Migration	Net Out Migration As % of Starting Popn
<u>Morvern</u>		
1801	-	-
1811	-408	19.6
1821	- 76	4.0
1831	- 57	2.9
1841	-577	27.0
1851	-404	22.8
1861	-476	30.8
1871	-362	29.5
1881	-221	22.7
1891	- 78	9.4
1901	-137	16.7
<u>Tiree and Coll</u>		
1801	-	-
1811	-260	5.0
1821	-516	9.5
1831	-220	4.0
1841	-513	8.9
1851	-598	10.2
1861	-1302	27.0
1871	-794	19.9
1881	-463	13.0
1891	-684	20.3
1901	-517	17.4

(Source: Flinn, 1977:320)

markets. Destruction of the indigenous Irish industries followed and the industrial supremacy of England in these manufacturing areas was retained. The repeal of the Corn Laws in 1846 signalled further the end of Irish grain exports to England.

The effects of the intermittent imposition of tariff acts on England's part is reflected in the destruction, on the one hand, of a sector of the Irish economy, while at the same time enhancing another. With the profitability of supplying England's needs, the absentee English landlords of Ireland were encouraged via the middlemen to further increase their rents or to proceed with enclosing land. The tendency to convert small farms into larger ones was strengthened in 1821 (Redford, 1976:145). Migration to England was the recourse taken by those that were displaced. With the increasing profitability in sending grain to England, especially after 1806, land rents rose exorbitantly, fueled by the desire of absentee landlords (mostly in England) to draw as much 'tribute' out of England's colony as possible (Connell, 1950(a):428-433). Via the middlemen agents, these landlords extracted enormous rents from the Irish farmer. It has been estimated that by the mid-18th century approximately one-third of Ireland's produce was sent out of the country as rental payments (Hechter, 1975:85-86). Connell (1950(b):63), reporting on the annual income received from

the land by these absentee landlords, shows us the extent of such intakes. In 1729, the income from rents of the list of absentee landlords was £627,799. It rose to £4 million by 1830 and reached £6 to £7 million by 1845.

This demand for increasing rental payments was managed by the middlemen agents who were at the same time extorting their share. In fact, in cases such as the county of Cork, middlemen drew more than three times as much as the landlord (Connell, 1950(a):69). Furthermore, they could exact labor, horses or farm products from the tenant farmer for their needs. The rising rents forced and encouraged the multiplication of tiny holdings which led to subdivisions. For example, by 1841 in Connacht, 64% of the farms were under 5 acres (Hobsbawm, 1961:164-166). According to Connell (1950(a):164), the whole of Ireland had holdings where 45% did not exceed 5 acres and 81% did not exceed 15 acres. As rents rose, the period of land tenure was increasingly shortened to allow for further increases when they were due (Connell, 1950(b):69). More often, no agreement was made to prevent the landlord from evicting the tenant farmer, and if there were rental agreements the cost for a legal eviction was very much less than that in England. Legislation passed in 1816 and 1819 brought the cost of a legal eviction down to one quarter of that in England (Cowan, 1927). The added practice of auctioning farm land further exacerbated such

conditions. This auctioning process meant that the tenant farmer had to bid for his own farm when his tenure on the land ended. The auction process did not provide any advantage to the original tenant and this forced the farmer to bid high prices in order to keep his farm and home. The inflationary aspect of such a practice, which was advantageous to the landlord and middleman, is commented upon by Connell (1950(b):74):

"When a lease expires ... there is a public advertisement, with a notice annexed, that no preference will be given, that is the old tenant will not be preferred and any person bidding higher will be put in possession. Thus the land is at public auction, and the old occupier, unwilling to remove, and having no place for himself and his family, through fear of losing a residence, has been bidding against himself, until he has raised the rent beyond the value."

To meet the exorbitant rent increases, the Irish farmers devoted more and more of their acreage to planting grain (rent crops) than to subsistence crops. For their subsistence needs, potatoes were grown by the farmers, mainly because of its high yield per acre, for an average acre would yield more if planted with potatoes than with wheat. It is estimated that an acre would give 8½ tons of potatoes whereas only 16 hundred weights of wheat would be harvested. Dividing this yield by an average intake per person daily, growing potatoes would feed three times as many people per acre than growing wheat. At the very least, according to Connell (1950(b):123), an acre of land planted

with potatoes would support double the amount of people than wheat would. With such high yield capacity, potatoes became the only stable diet. It is estimated that an average person consumed in Ireland, during the 19th century, 10-12 pounds of potatoes a day (Hobsbawm, 1961:164-166). Besides an occasional herring or milk, potatoes became the daily diet for the Irish.

No doubt such economic conditions were complemented by the living condition of the Irish farmer. Their homes were cheaply built, in which the outside walls were seldom more than five to six feet high, usually made of mud or sod. For the roofs, turfs resting on branches of trees and covered with straw, or rushes, or stalks of potatoes were the predominant way of construction. Usually, the whole family would squeeze into the house along with the farm animals. Read the evidence presented in the Blue Books of such conditions:

"... the manner in which the poor of this country live, I cannot help calling beastly. For upon the same floor, and frequently without partition are lodged the husband and wife, the multitudinous brood of children, all huddled together upon the straw or rushes, with the cow, the calf, the pig, and the horse, if they are rich enough to have one."

(Quoted in Connell, 1950(b):58).

These conditions were also confirmed by Alexis De Tocqueville (1958) on his travels to Ireland. Such desperate conditions were typical of Ireland of the times.

The series of crop failures in the early 19th century, especially between the 1830's-1840's, sealed the fate of Ireland's rural population. Migration to Irish cities was impossible because, by this time, Irish industries were on a decline due to England's tariff walls. We see this in the large migration of Irish weavers to England in the early 19th century as a result of the decline of the Irish Textile industry. Thus, the only route available was migration to England and overseas. Movement overseas at this stage was migration to the United States, British North America and, to a lesser extent, Australasia.

Examining the census population of Great Britain and Ireland by birthplace can give us a rough estimate of the level of internal migration that has occurred in the British Isles. In Table 3.5, we find that for England and Wales in 1841 the number of Irish-born living in both countries was 291,000. This figure rose to 520,000 ten years later and continued to rise to 602,000 by 1861. Such levels were reduced somewhat until 1881 when the numbers began to fall to 427,000 by 1901. For Scotland, there was also a gentle rise in the Irish-born, but the increases were not as significant as those of England's. The number of Irish born in Scotland was 126,000 in 1841 and rose to 207,000 in 1851. It stayed at this level until 1901 with large decreases starting in 1911. Thus the level of outmigration to England

Table 3.5
Census Population of the United Kingdom by Birthplace
1841-1901 (Thousands)

Birthplace	1841	1851	1861	1871	1881	1891	1901
<u>England and Wales</u>							
England and Wales	15,442	17,166	19,120	21,692	24,859	27,883	31,270
Scotland	104	130	169	213	254	282	317
Ireland	291	520	602	567	562	458	427
Foreign Countries	39	62	102	139	174	233	339
<u>Scotland</u>							
England and Wales	38	47	56	70	92	111	134
Scotland	2,439	2,623	2,786	3,062	3,398	3,689	4,086
Ireland	126	207	204	208	219	195	205
Foreign Countries	3	4	4	5	6	9	30
<u>Northern Ireland</u>							
England and Wales	4	6	7	11	13	16	20
Scotland	3	6	7	9	11	15	19
Ireland	1,638	1,428	1,380	1,325	1,264	1,183	1,191
Foreign Countries	1	1	2	2	3	3	5
<u>Southern Ireland</u>							
England and Wales	18	29	44	56	56	57	57
Scotland	5	6	10	11	11	12	11
Ireland	6,503	5,069	4,340	3,982	3,799	3,399	3,136
Foreign Countries	3	6	6	9	9	10	12

(Source: Carrier and Jeffrey, 1953:15)

and overseas resulted in population losses in Northern Ireland and Southern Ireland. However, the level of out-migration was not as severe in Northern Ireland as Southern Ireland. With a population of 1,638,000 Irish-born in 1841, Northern Ireland lost 455,000 by 1891. The loss was more dramatic in Southern Ireland. With 6,503,000 Irish-born in 1841, Southern Ireland's number of Irish-born decreased to 3,399,000 by 1891. Net losses by migration for Great Britain and Ireland is presented in Table 3.6. The available data shows net losses for Great Britain and Ireland between the years 1841-1931.

With these huge losses in the population of Great Britain and Ireland due to migration, a substantial number of the migrants arrived in British North America. Table 3.7 represents the numbers of these emigrants to British North America from England, Wales, Scotland, and Ireland between the years 1825-1900. Transforming these figures into percentages for emigrants arriving in British North America as a proportion of total emigrants leaving the British Isles between 1825 to 1900 for the United States, British North America and Australasia, we find in Table 3.8 that the proportion of Irish immigrants arriving in British North America to be very high for the early 19th century, especially during the years of 1825-1849. The overall percentages of Great Britain's, and Ireland's emigrant population

Table 3.6

**Net Gain or Loss by Migration, Great Britain and Ireland
1841-1931 (Thousands)**

Period	England & Wales	Scotland	Ireland	
			North	South
1841-51	- 81	...	...	...
1851-61	-327	...	...	...
1861-71	-206	-120	-945	
1871-81	-164	- 93	-162	-502
1881-91	-601	-217	-141	-597
1891-1901	- 69	- 53	- 68	-396
1901-11	-501	-254	- 64	-262
1911-21	-620	-239	- 59	...
1921-31	-172	-392	-103	-405

(Source: Carrier and Jeffrey, 1953:14)

Table 3.7

**Number of Emigrants from Great Britain and Ireland
to British North America**

Year	England & Wales	Scotland	Ireland	Great Britain & Ireland
1825-1829	7,334	11,400	40,864	59,598
1830-1834	49,711	30,735	143,402	223,848
1835-1839	23,944	10,392	62,582	96,918
1840-1844	40,639	25,655	104,728	171,022
1845-1849	69,071	17,925	170,358	257,354
1850-1854	50,188	27,411	101,041	178,640
1855-1859	19,509	15,511	18,165	53,185
1860-1864	9,911	10,447	15,724	36,082
1865-1869	35,717	11,415	22,693	63,825
1870-1874	90,462	19,518	16,297	126,277
1875-1879	43,202	6,540	8,223	57,965
1880-1884	109,926	18,067	32,581	160,574
1885-1889	107,442	17,928	14,360	139,730
1890-1894	93,182	9,601	6,760	109,543
1895-1900	84,960	9,401	5,592	99,953

(Source: Carrier and Jeffrey, 1953:95-96)

Table 3.8

% of Emigrants to British North America as a Proportion
of Total Number of Emigrants to
U.S.A., B.N.A., and Australasia

1815-1900

Year	England & Wales	Scotland	Ireland	Total # of Emigrants to B.N.A.
	%	%	%	%
1815-1819	...	...	...	47.1
1820-1824	...	...	...	69.2
1825-1829	6.0	8.9	36.0	50.9
1830-1834	12.3	8.0	37.0	57.3
1835-1839	7.8	3.7	20.0	31.5
1840-1844	9.3	5.8	22.4	37.5
1845-1849	7.4	1.8	18.4	27.6
1850-1854	3.3	1.9	7.2	12.4
1855-1859	2.6	2.2	2.6	7.4
1860-1864	1.6	1.8	2.5	5.9
1865-1869	4.4	1.4	2.8	8.6
1870-1874	9.1	1.9	1.6	12.6
1875-1879	7.6	1.1	1.5	10.2
1880-1884	8.8	1.5	2.5	12.8
1885-1889	9.1	1.5	1.2	11.8
1890-1894	10.4	1.0	0.7	12.1
1895-1900	11.3	1.2	0.7	13.2

(Source: Carrier and Jeffrey, 1953:95-96)

to British North America in proportion to total number of emigrants leaving the British Isles was high between the years 1815-1849. At certain stages, such as 1815-1834, the percentages were close to 50% or higher. The level continued to be high (approximately averaging 32%) until mid-19th Century with the exception of the years 1838-1839, and 1848-1849.

Inspecting (within the limits of the availability of data) the occupational distribution of emigrants from the British Isles to British North America (see Table 3.9) between 1854-1900, we find that a substantial number (per 10,000 emigrants) of the people to be laborers and those whose pursuits were in the agricultural sector. The proportion of emigrants in these combined occupational categories per 10,000 emigrants, was 70.8% in 1854-1860, dropping to 48.4% in 1871-1876 and rising to 74.5% in 1881-1890. Coupled with the categories of skilled tradesmen, these occupational categories became the major occupational categories of the emigrants arriving in British North America for the years specified.²⁰ The percentages ranged from 87.4% in 1854-1860 to 72% in 1891-1900. In the case of Irish emigrants flowing to all parts of the world, (including B.N.A.), the percentages are even higher in terms of laborers and those in agricultural occupations. They ranged from 81.4% per 10,000 emigrants in 1877-1880 to 87.8% for the years 1881-1890 (see Table 3.10).

Such a concentration of emigrants in these occupational categories (laborers and skilled workers) confirms further our thesis that the displacement of farmers, agri-

²⁰ Recent studies by Akenson (1982:218-219) and Mclean (1986:189) have suggested that pre 1846 Irish and Scottish emigrants, who arrived in British North America, were mainly tenant farmers, textile workers and weavers with modest resources.

cultural wage laborers and skilled workers from the British Isles was due, on the whole, to capitalist development and internal core-periphery relations occurring in the British Isles. With these changes in the early 19th century capitalist world-economy and the flow of emigrants from the British Isles to British North America, the stage was thus set for the expansion of wood production in early Canada to satisfy the needs of Great Britain.

Table 3.9
Occupational Distribution of Emigrants to
British North America
1854-1900 (per 10,000 Emigrants)

	1854/ 1860		1861/ 1870		1871/ 1876		1877/ 1880		1881/ 1890		1891/ 1900	
Commerce, Finance, Insurance, Professional Students	749	7.5	1359	13.6	1597	16.0	2887	28.9	1594	15.9	2481	24.8
Mining & Quarrying	226	2.3	1102	11.0	34	0.3	11	0.1	24	0.2	83	0.8
Metal & Engineering	272	2.7	121	1.2	55	0.5	10	0.1	69	0.7	112	1.1
Building	235	2.3	123	1.2	154	1.5	6	0.01	61	0.6	50	0.5
Others	932	9.3	614	6.1	2952	29.5	1485	14.9	626	6.3	582	5.8
Transport & Communications	46	0.5	82	0.8	36	0.4	19	0.2	34	0.3	71	0.7
Agriculture	2093	20.9	1529	15.3	1025	10.3	762	7.6	1566	15.7	941	9.4
Laborers (other than Agriculture & Transport)	4987	49.9	4605	46.1	3806	38.1	4526	45.3	5879	58.8	5440	54.4
Insufficient Information to Classify	460	4.6	465	4.7	341	3.4	294	2.9	147	1.5	236	2.3

(Source: Carrier and Jeffrey, 1953:113-115)

Table 3.10
 Occupational Distribution of Irish Emigrants to
 all Parts of the World
 1877-1900 (per 10,000 Emigrants)

	# of Emigrants 1877-1880	%	# of Emigrants 1881-1890	%	# of Emigrants 1891-1900	%
Commerce, Finance, Insurance, Professional Students	552	5.5	484	4.84	632	6.3
Mining & Quarrying	32	.3	19	.2	12	.1
Metal & Engineering	82	.8	72	.7	95	1.0
Building	151	1.5	119	1.2	67	.7
Others	646	6.5	362	3.6	304	3.0
Transport & Communications	132	1.3	32	.3	133	1.3
Agriculture	781	3.8	580	5.8	429	4.3
Laborers	7,763	77.6	8,203	82.0	8,169	81.7
Insufficient Information to Classify	261	2.6	129	1.3	159	1.6

(Source: Carr-Saunders and Jeffrey, 1953:113)

CHAPTER 4

THE DYNAMICS OF TIMBER AND LUMBER CAPITAL ACCUMULATION
 IN THE 19th CENTURY CAPITALIST WORLD-ECONOMY:
 BRITISH NORTH AMERICAN WOOD OPERATIONS

4.0 INTRODUCTION

SETTING THE STAGE

An expansionary secular trend is characteristic of the motions of the capitalist world-economy¹. Such a secular tendency has been exhibited in the development of the world-economy, whereby through an incorporative process, new geographic areas and their associated labour processes are included and integrated into the system². Within this expansionary secular dynamic, we can locate the production of timber and lumber in British North America in the 19th century. In this case, however, it is not the beginnings of an incorporative process, but rather a continuation of an appropriative set of economic practices that started as

¹ The expansionary feature of the world-economy has been discussed fully in Hopkins and Wallerstein (1977:124-5) and Wallerstein (1979(a):145-6). This process is examined and placed in the context of the discussion of the dynamics of the capitalist world-system in chapter 2.

² Wallerstein (1979(a):45) defines incorporation as "the addition of new geographic areas to the capitalist world-economy at points of time posterior to the 'initial' expansion of the 16th century, which had been an integral part of the transformation of feudal Europe into a capitalist world-economy."

early as the mid-16th century³.

Initial periodization of the incorporation of British North America into the world-economy has been dated as between 1550-1660 (Hopkins and Wallerstein, 1982:7). This incorporative process (1550-1660) is depicted by the inclusion of parts of North America into the expansionary world-economy with the appropriation of two commodities -- fish, particularly cod, and fur -- that were fed into the consumptive and productive processes of Spain, Portugal, France, and England. For the former commodity, we witness by the end of the 16th century, fishing parties of approximately 15,000-fishermen plying the waters of the Grand Bank⁴ (Chew, 1977:30). By 1769, the size of the catch for the French fishery fleets, totalling 431 ships, was 215,030 quintals of fish (Innis, 1978:185). This economic practice of the harvesting of cod, as suggested by Myers (1972:3), led to the development of the Fur Trade,⁵ which for him is a result of the fishing parties coming into contact with the

³ Hopkins, Wallerstein and their associates (1977:125) at the Fernand Braudel Center have briefly summarized the main moments of such outer expansion (1450-1520, 1620-1660, 1750-1815, 1880-1900).

⁴ For a detailed account of the competition and rivalry that punctuated the early stages of this economic activity see Harold Innis (1978).

⁵ For a brief discussion of the emergence of the Fur Trade in North America see Chew (1977:30-32).

native Indians. Harold Innis (1970:9) has expressed this in another manner, "the contact of Europeans with the Indians was essential to the development of the fur trade." It is safe, therefore, to conclude that throughout the latter half of the 17th and up to the mid-18th centuries, the appropriation of cod and fur from the northern lands of the American continent dominated the political economy of this part of the capitalist world-economy. In the same breath, it must be noted that this incorporative process of the absorption of the northern land mass and the integration of the economic processes into the world-economy did not occur in an atmosphere of 'silent surrender'⁶ on the part of the indigenous native population to these incursions, or in a rivalry-free milieu between competing nation-states. The history of the development of the cod fisheries and the fur trade is replete with events of intense competition and warfare between the Europeans (French and British) and the native population of the northern land⁷. As such, these struggles were not only confined between the foreigners and

⁶ This term is derived from Kari Levitt's (1970) Silent Surrender. However, the image suggested here is contra to what Levitt (1970) suggests in her book.

⁷ For a fuller treatment of these events see Harold Innis The Cod Fisheries and The Fur Trade in Canada. For a Marxist account of these occasions see Stanley Ryerson's The Founding of Canada.

and native people, for they extended to the rivalry and competition between the foreigners themselves, i.e., between the British and French merchants and the states of France and Great Britain.

As with other incorporative processes that occurred in other parts of the capitalist world-economy, the colonizing power inevitably despatched its own populace to facilitate and establish the new economic practices that had been engendered. In the French case, a seigneurial form of land tenure was established on the north shore of the St. Lawrence (Chew, 1977:32-33). In the early history of New France, besides the export of fur, wood products such as masts and planking for ships were sent in small quantities to the naval dockyards in France. Shipbuilding as an activity was also undertaken in Quebec. However, due to the labour shortage and the lack of capital and equipment, the growth of the timber industry was limited (Ryerson, 1960: 116). With the further development of the colony, we find that in the early 18th century, a number of seigneurs became involved in timber production. According to Ryerson, (1960: 151-152) by 1739 there were 70 sawmills in New France.

Wood exports from New France, however, were not voluminous as compared to the later levels of exports following the British conquest. Such a low reliance by France on the northern woods can be explained through several

conditions: the availability of a large internal wood supply in France, the reluctance of the French entrepreneurs to be dependent on this external northern source, and the high costs of wages to cut the timber in the new colony (Wallerstein, 1980(a):99-100; Bamford, 1956:120-128). The British, however, had no choice. As we have indicated in the previous chapter, Great Britain was experiencing a severe shortage of wood from its internal sources by the mid- 17th century. The later wars between Great Britain and France in North America in the 18th century, that led to the conquest of New France by the British in 1760, gave Great Britain additional lands in the North American continent, and provided the necessary timber resources for its factories and navy. The availability of this additional wood resource area became especially important during moments of interruption in Britain's Baltic and New England supply sources.

Post conquest British North America⁸ (1760) witnessed the beginnings of the export of wood products to Great Britain. Potash making began in 1767 and by 1770, fifty tons of the product were shipped to Britain (Lower, 1973:37). Staves were also exported for the making of oak

⁸ British North America at this stage covers the St. Lawrence watershed, Newfoundland, the island of St. John (Prince Edward Island as we know it today) and Nova Scotia which until 1784 included New Brunswick.

barrels. By 1771, 213,000 of this wood product were shipped (Lower, 1973:37). But the levels of wood exports to Britain from British North America by 1792 were still quite insignificant as compared to Britain's Baltic wood imports. For between 1788 and 1792, colonial wood imports were equivalent to only 1% of all Baltic imports into Great Britain and in the ensuing five years, imports of colonial wood into Great Britain rose only 0.2% (Gillis, 1978:4).

Such low levels were to change in the early 19th century following the Napoleonic Wars, with the transfer of capital investments to British North America, and the imposition of tariff duties in Britain on Baltic wood. It is within such a socio-economic historical conjuncture of the world-economy that we turn in this chapter to trace the dynamics of capital accumulation in the production of timber and lumber in British North America. This tracing, however, is incomplete without a consideration of the intervening processes of state policies and actions that affect the circuit of capital accumulation. Therefore, for this chapter, we will also consider the policies and actions of the Imperial and colonial states and the early socio-political struggles to maintain and control this accumulation process.

4.1 THE CIRCUITS OF CAPITAL ACCUMULATION: THE OPERATIONS OF THE TIMBER AND LUMBER FIRMS IN BRITISH NORTH AMERICA

Introduction

According to Fernand Braudel (1982:433), an examination of the practices of business firms is stimulating, for it reveals to us not only the activities of the particular firm, but as well, in general terms 'economic life and capitalist practice'. We read Braudel's assertions as suggesting that revelations derived from our inspection of the activities of particular firms can provide us also with the contours of a particular sector of capitalist accumulation and socio-economic practices. What this means is that the findings from our particularistic examination of the operations of timber and lumber firms can be related to the "phases" of the circuits of capital accumulation of these firms and translated to compose a more systematic picture of the dynamics of a specific segment of capitalist accumulation within the world-economy.

For us, the capitalist firm is the primary focus of capitalist production and accumulation. Along with Barr (1981), we view the capitalist firm, (in our case, the timber and lumber company) operating in the world-economy as a unit of capital.⁹ In Chapter 2, we traced in theoretical

⁹ For a full explication of the circuit of capital of the capitalist enterprise, we direct the reader to Ken Barr's (1981) On the Capitalist Enterprise.

terms the four phases which this capitalist firm traverses in its own 'reproduction'. For this act of 'reproduction', the capitalist firm necessarily interacts and interrelates with other social institutions in the environment external to it.¹⁰ As such, policies and actions of the state imperatively maintain or hinder the circuit of capital accumulation of the capitalist firm. In other words, capital accumulation circuits occur within networks "defined, guaranteed and informed by state centred processes" (Hopkins and Wallerstein, 1981:246). Therefore, in this process of interaction with the environment, the firm's operations are affected by, and as well affect the social institutions in which it interrelates.

In the previous chapter, we have outlined the conditions that led to an inflow of capitalist timber and lumber firms into British North America during the early 19th century as a consequence of the motions in the world-economy, especially the political-economic conflict between France and Great Britain.¹¹ This shift of operations from

¹⁰ In what follows, we will use this framework implicitly as a tool to understand the circuits of (individual) capital accumulation.

¹¹ Fernand Ouellet (1980(a):157) has asserted that the timber trade of Canada arose due to the Continental Blockade imposed by Napoleon. He writes: "On the other hand, the timber trade, which was destined to replace furs as the pole of social and economic integration, was a product of the Continental Blockade".

the Baltic region to British North America by timber and lumber companies based in Great Britain is reflected, for example, in the business activity of a timber and lumber firm named Pollok, Gilmour and Company of Glasgow. This firm was involved in the Baltic trade, but it had to open a branch at Miramichi, New Brunswick in 1812 due to the Napoleonic Wars (Rankin, 1921). According to the company's biographer, one of the partners of the firms, Allan Gilmour, arrived in British North America to survey the conditions during the time when the duty on foreign wood was being imposed in Great Britain. When questioned later in 1815 by the Select Committee on Timber Duties, Allan Gilmour complained of being unable to visit the Baltic region, Russia, and Prussia because of Bonaparte's decrees (see Select Committee on Timber Duties, 1835:240-41). And in answer to the Select Committee's question of whether the firm of Pollok and Gilmour was engaged in the timber trade of the Baltic, Allan Gilmour replied: "I have not done much of late because we are driven out of it by foreign ships. That was our whole trade, but they forced me out of it and I turned my attention to British America" (see Select Committee on Timber Duties, 1835:238).

The areas in British North America which came under

this "assault"¹² were mainly parts of Quebec, Ontario and New Brunswick.¹³ Pine, spruce and oak were culled from these regions and exported to Great Britain. With the demand for wood in Great Britain rising after the post-Napoleonic War boom, an increase of wood shipments from British North America under the colonial tariff protection naturally followed. This rise in the consumption of wood in Great Britain was the result of the increase in population in England and the development of a national railway system in the 1830's (Wynn, 1974:4). Table 4.1 outlines the time series of timber imports into Great Britain from British North America between 1800-1850.

Sheltered by a protective tariff, the level of imports into Great Britain from British North America in the

¹² This word is used in the same tenor as Wynn's discussion (1974). In his intensive study of the exploitation of the New Brunswick forests, Wynn views this activity as one which is committed to supply the needs of a metropolitan centre: Great Britain.

¹³ These were the main areas in British North America which provided the wood for shipment to the core areas of the world-economy. Most of the trees in Nova Scotia were cut down by the 1770's (Cross, 1968:76). In the West, such as British Columbia, lumbering was on a very small scale even by 1873. The wood shipments from British Columbia were sent to Australia, Hawaii, Chile and China (Lawrence, 1957). The monies invested in British Columbia for the production of wood were from Great Britain and the United States (Lawrence, 1957:26). According to Lawrence (1957:37), after 1886 the scale of timber operations in British Columbia rose with the injection of large amounts of monies from the United States. The Kootenay region was one of the first areas to come to the attention of the lumbermen.

Table 4.1

Imports of Timber into Great Britain from
British North America: 1800-1850

Year	Square Timber (Loads)	Deals (Great Hundred)	Year	Square Timber (Loads)	Deals (Great Hundred)
1800	5,000	400	1825	430,000	15,000
1801	6,000	400	1826	400,000	15,000
1802	10,000	400	1827	290,000	12,000
1803	12,000	400	1828	330,000	16,000
1804	12,000	400	1829	345,000	18,000
1805	15,000	400	1830	350,000	20,000
1806	15,000	400	1831	370,000	22,000
1807	30,000	400	1832	440,000	23,000
1808	30,000	500	1833	420,000	25,000
1809	90,000	1,000	1834	470,000	27,000
1810	100,000	750	1835	560,000	27,000
1811	120,000	4,000	1836	530,000	29,000
1812	145,000	4,000	1837	550,000	31,000
1813	-	-	1838	560,000	31,000
1814	50,000	2,000	1839	570,000	34,000
1815	120,000	2,000	1840	640,000	33,000
1816	140,000	2,000	1841	620,000	37,000
1817	160,000	4,000	1842	370,000	330,000 (Loads)
1818	240,000	800	1843	570,000	350,000 (Loads)
1819	290,000	120,000	1844	540,000	400,000 (Loads)
1820	280,000	10,000	1845	790,000	490,000 (Loads)
1821	290,000	10,000	1846	750,000	480,000 (Loads)
1822	320,000	8,000	1847	590,000	490,000 (Loads)
1823	350,000	10,000	1848	540,000	490,000 (Loads)
1824	390,000	120,000	1849	580,000	460,000 (Loads)
			1850	610,000	430,000 (Loads)

Note: A load of square timber equalled 50 cubic feet. A great hundred of deals equalled 120 deals.

(Source: Giffis, 1978:303)

post-Napoleonic War Period completely surpassed the level of imports from the Baltic regions. Alfred Knight (1956:12) reports such differences in import levels between British North America and the Baltic region (see Table 4.2).

Besides the large market in Great Britain, the United States was also beginning to absorb the timber and lumber produced in Canada. By the 1830's, according to Gillis (1978:60) and Hughson (1964:39), the United States was becoming a growing market for timber and lumber produced in British North America. Wood exports from Canada played a

Table 4.2

Imports of Timber into Great Britain
(1813-1827)

Year	From British North America (Loads)	From Baltic Region (Loads)
1813	171,795	27,175
1814	50,790	126,289
1815	122,212	194,502
1816	153,707	79,885
1817	163,611	86,715
1818	248,669	141,885
1819	322,920	119,237
1820	307,813	65,841
1821	317,563	79,202
1822	345,741	137,248
1823	383,747	161,472
1824	415,363	195,900
1825	467,625	286,871
1826	455,800	156,078
1827	343,203	173,382

(Source: Knight, 1956:12)

very significant role in the overall proportion of exports of Canada in the 19th century and thus was a significant element in the economy of Canada. Throughout the century, wood exports amounted to approximately one-third of total Canadian exports. In some years (1869-1875) it was more than one third of total Canadian exports whereas in other years (1885-1899) it was slightly less (see Table 4.3).

Naturally, such propensity to meet the market demands of the world-economy was a consequence of the availability in British North America of the "holy trinity": land, labour and capital.¹⁴ As we have discussed in the previous chapter, British North America's ecology provided a plentiful supply of trees with its wide expanse of virgin forest lands. In terms of labour supply, the migrations of the displaced British population supplemented the local sources. In the previous chapter we have outlined how the transformations in the world-economy engendered the wide scale migratory flows from the British Isles to British North America during this period. These flows were facilitated further by specific actions undertaken by the British State and certain segments of its population. Writers such as Helen Cowan (1927) and Fernand Ouellet (1980(a)) have suggested that the British State, the merchants, the ship-

¹⁴ Capital as it is used here means the availability of monetary funds to pay for the necessities of production.

Table 4.3

Percentage of Total Canadian Exports by Year
at 1900 Price Levels (1869-1899)

	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883
Agricultural	11.5	13.4	9.9	11.4	11.2	13.3	15.2	24.7	19.6	23.3	26.6	27.8	24.3	24.6	24.3
Animals and their Products	19.9	25.0	24.8	20.6	25.3	20.8	27.3	28.8	30.7	32.0	36.6	34.0	34.9	33.6	33.5
Fibres	0.6	1.3	0.8	1.1	0.7	0.7	0.8	1.0	0.9	0.8	0.9	0.9	0.4	0.3	0.5
Wood	43.9	37.8	38.0	36.9	38.5	38.6	36.2	31.7	36.8	32.4	24.5	26.4	30.4	29.3	31.2
Iron and its Products	0.9	1.0	1.0	1.7	1.3	1.8	1.3	1.2	1.8	1.8	1.4	1.8	1.6	1.9	1.1
Non-Ferrous Metals	0.7	0.6	1.1	2.9	2.6	1.2	2.9	2.0	1.5	1.4	2.0	1.4	1.1	1.7	1.1
Non-Metallic Minerals	3.1	3.3	3.7	2.8	3.3	2.0	1.6	1.5	2.0	1.6	2.0	1.5	1.7	2.0	2.2
Chemical and Allied Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	19.5	17.6	20.7	22.6	17.1	21.6	14.7	9.1	6.7	6.7	6.0	6.2	5.6	6.6	6.1

Source: Taylor, K.W., Statistical Contributions to Canadian Economic History

Table 4.3 (concluded)
 Percentage of Total Canadian Exports by Year
 at 1900 Price Levels (1869-1899)

	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
Agricultural	16.2	18.2	20.6	23.8	20.6	17.6	18.8	17.1	24.9	23.2	23.2	19.4	16.2	21.2	24.9	23.2
Animals and their Products	37.4	42.9	40.9	38.1	40.9	39.5	37.1	39.9	37.3	37.6	40.4	41.6	43.3	39.1	40.2	40.9
Fibres	0.5	0.4	0.6	0.5	0.6	0.8	0.8	0.8	1.4	1.1	0.7	1.8	1.6	2.1	0.8	0.7
Wood	35.0	27.7	27.6	25.5	27.6	30.3	31.8	30.8	24.1	26.4	25.2	24.0	25.2	23.9	18.1	19.9
Iron and its Products	0.8	0.5	0.6	0.5	0.6	0.6	0.6	0.5	0.6	0.7	0.7	0.9	1.0	0.9	0.6	1.6
Non-Ferrous Metals	1.1	1.1	0.9	1.2	0.9	0.7	1.0	1.5	1.7	1.5	1.4	2.5	2.4	5.1	6.9	5.6
Non-Metallic Minerals	2.7	2.7	3.1	2.9	3.1	3.3	3.7	3.8	3.6	3.2	3.3	3.6	3.1	2.8	2.8	2.8
Chemical and Allied Products	-	-	-	-	-	-	-	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.4	0.3
Miscellaneous	6.3	6.5	5.7	7.5	5.7	7.2	6.2	5.4	6.2	6.1	4.9	5.8	5.9	4.7	5.4	5.0

Source: Taylor, K.W., Statistical Contributions to Canadian Economic History

3

MICRO
MAGNETIC

owners and land speculators¹⁵ in Great Britain, and in the colonies encouraged the migratory flows. According to Cowan (1927:15), the merchants and shipowners were the strongest advocates of emigration to the British North American colonies. In fact, Scottish merchants bought lands in New Brunswick and brought groups of Scotsmen over to service their economic practices. The British State's interest in this migratory movement of people was to safeguard its own territorial control, and, as well, to encourage British trade (Cowan, 1927:7). Special offers of free land were made to British officers and subjects and "by this means the mother country proposed to use disbanded soldiers and pioneers to form the nucleus of a new loyal population...." (Cowan, 1927:7). Government funds were also provided to landlords in Great Britain by means of the Emigration Advances Act of 1851 to assist the needy tenants on their lands to move to the colonies (Cowan, 1927:104).

The movements of emigrants from Great Britain to the

¹⁵ Land companies such as the Canada Company, the British American Land Company and the New Brunswick and Nova Scotia Land Company bought and sold lands to emigrants. The Canada Company sold lands at very rapid increases in prices from 44s 9d an acre in 1855 to 51s 11d by 1857. By 1859, it was selling land at 60s 5d (Cowan, 1927:135). The British American Land Company was also very active during the early 19th century. In 1835, it signed an agreement with the colonial office for the sale of 850,000 acres of crown lands worth £120,000. The New Brunswick Land Company also undertook to sell 200,000 acres of crown lands in 1832.

colonies were also encouraged by the nature of the timber and lumber trade itself. Timber ships for the trans-Atlantic passage from Great Britain to British North America had a plentiful supply of spaces after they had unloaded their cargoes of wood. In this fashion, the poor emigrants became the ballast for the empty timber ships sailing from Great Britain.¹⁶ Therefore capital investments in transportation did not remain idle, these ships arrived in Canada with immigrants and departed with wood.

The above factors therefore further encouraged the migratory flows to British North America and increased the population of the colonies.¹⁷ New Brunswick witnessed a

¹⁶ The timber vessel had no compartments as it carried timber from keel to deck (Cowan, 1927:146). When it was transformed to carrying emigrants, a temporary deck was prepared 5 1/2 feet below the upper deck of the ship. This provided passenger space of 95 feet by 25 feet for a 400 ton vessel. In it, a load of 240 passengers would be placed. Conditions on these ships were at best tolerable and there were no portholes available. The passengers had to provide their own food supplies during the voyage including cooking basins and also vinegar to cut the taste of brackish water supplied. The length of an average voyage in 1843 was 44 days from the British Isles. On occasions, it has been reported to stretch for 88 days (Cowan, 1927:151). For a further account of the conditions faced by the immigrants on these ships see Lower (1973:241-244).

¹⁷ Not all the immigrants who arrived, stayed in Canada. There were out-migrations to the United States. According to MacLeod (1967:135), Upper Canada and Lower Canada were losing almost 4000 persons of their population annually to the United States from 1844 to 1849. This condition was also repeated in the Maritimes. For a fuller discussion see MacLeod (1967:135-141).

rapid multiplication of population from 25,000 in 1800 to 200,000 by 1851 (Wynn, 1981:3). In Upper Canada, the population more than doubled from 150,000 to 450,000 over the course of 17 years between 1824 and 1841 (Cowan, 1927:185). Ouellet (1980(a):293) has calculated that the total arrival at the port of Quebec between 1815 and 1823 represented 21% of the population of Lower Canada.

For investments in wood operations and production, money capital was available from timber and lumber firms quartered in Great Britain and the United States. As a result, timber and lumber operations were set up in New Brunswick, Quebec and Ontario by these companies (Ouellet, 1980(a):196; Whitton, 1974:6). In terms of the time frame of investments, we note indications of capitalist enterprises from Great Britain investing in New Brunswick as early as the 1810's (Lower, 1973). Investments from the United States, however, did not arrive in New Brunswick until well over a decade later - in the 1820's (Wynn, 1974; Gillis, 1978). In partnership with local interests, American monetary investments from Boston and Maine penetrated New Brunswick. For example, 100,000 acres of land near the Tobique River were purchased by United States interests (Wynn, 1981:104). For Central Canada, we find timber and lumber firms from the United States starting timber operations as early as 1801 in the Ottawa valley. On the whole,

however, larger firms from the United States did not invest in Quebec and Ontario until the mid-19th century (Hughson, 1964; Lower, 1928). At that stage, we find companies such as Bronson and Weston, Perley and Pattee and Levi Young investing in timber operations (Hughson, 1964; PAC, Bronson Company, MG28 III 26, vol. 716).

For the start-up of timber operations in British North America, the initial activities of the timber and lumber firms quartered in Great Britain and the United States involved the establishment of branch offices (Lower, 1933:48). In the case of one of the major timber and lumber companies operating in British North America with its headquarters in Glasgow, Pollok, Gilmour and Company¹⁸, a total of seven branch houses¹⁹ were opened at various times (see Table 4.4). This establishment of offices in British North America is also reflected in the business operations

¹⁸ This firm was formed by Allan Gilmour Senior and two brothers, John and Arthur Pollok in Glasgow (Rankin, 1921:12).

¹⁹ In addition to these branches in British North America, other branches were set up in the United States, England and India: Rankin, Gilmour and Company, Liverpool, England; Pollok, Hoghton and Company, Mobile, U.S.A.; and John and William Pollok, Calcutta, India. A search of the Public Archives in Calcutta did not yield any records of John and William Pollok Company, Calcutta, India. We can assume that these records did not survive the times or were never deposited.

Table 4.4

Branch Houses Opened By Pollok, Gilmour and Company

<u>Year</u>	<u>Branch House</u>	<u>Location</u>
1812	Gilmour, Rankin and Company	Miramichi, New Brunswick
1822	Robert Rankin and Company	St. John, New Brunswick
1828	Allan Gilmour and Company	Quebec, Quebec
1828	Gilmour and Company	Montreal, Quebec
1833	Arthur Ritchie and Company	Restigouche, New Brunswick
1835	Ferguson, Rankin and Company	Bathurst, New Brunswick
1841	Gilmour and Company	Ottawa, Ontario

of the Bronson and Weston Company.²⁰ In 1853, the Bronson and Weston Company opened an office in Ottawa and, at the same time, this firm had offices in Burlington, Vermont (Bronsons, Weston, Greene and Company) and Albany, New York (J.W. Dunham and Company) (PAC, Bronson Company, MG28 III

²⁰ According to Ottawa History (Vol. 5: 84-85), the firm of Harris and Bronson owned lumber mills and pine limits in the Upper Hudson. However by 1849, the area was nearly exhausted of pine trees and new timber areas had to be located. One of the firm's owners, H.F. Bronson visited Ottawa, and was encouraged by prominent local citizens to initiate timber operations. These Ottawa citizens as well, encouraged the Government to put the area's water lots for sale, and in 1851, H.F. Bronson and his partner J.J. Harris bought these lots.

The company started operations in Central Canada in 1853 and went through several name changes during its years of operations. In 1853 it was named Harris and Bronson Company, however, by 1867 it was changed to Bronson and Weston Company. By 1888, it was called Bronson and Weston Lumber Company and renamed the Bronson Company in 1899.

26, vol. 716).²¹ With the opening of offices in British North America by these timber and lumber firms based in Great Britain and the United States, the circuit for the accumulation of capital was therefore initiated.

4.2 THE PROCUREMENT PHASE

4.2.1 Financing the Operations

To embark on the operations of producing logs and sawn lumber for the market, monetary investments (money-capital) are required to purchase the tools, raw materials and labour to undertake such activities. *Ab initio*, in the early parts of the 19th century the financing for the timber operations of the timber and lumber firms were from sources outside British North America. Specifically, the funds needed to finance the timber and lumber operations originated from England and the United States. These funds manifested themselves in British North America in the form of manufactures necessary to undertake productive activity, or in the form of drafts or gold notes to cover expenses for the timber and lumber production processes.

What this indicates is that during the initial period of the early 19th century, the parent firm based outside

²¹ Towards the end of the 19th century, Bronson and Weston Company invested in timber operations in California and owned the majority of the shares of the Little River Redwood Company.

British North America would be responsible mainly for the monetary outlay necessary for the production operations of its branch houses in British North America (Rankin, 1921:21; Lower, 1933:49). This source of financing is pinpointed by John Rankin (1921:22), a descendant of the original owners, who wrote the following about the financial transactions of the firm Pollok, Gilmour and Company and its foreign branches in British North America:

"Till 1839 all matters, including domestic, concerning the foreign houses and their stores, had to be dealt with at Glasgow. Spring and autumn orders for these stores would be a heavy matter; **except absolute provisions, everything had to come from this side to meet the wants of small communities on the other** [my emphases]. When the foreign houses began shipbuilding (as will be recorded below), all but the wood itself for the various shipyards had to go from this side. The store requisition sheets would literally cover everything from a needle to an anchor."

According to Rankin (1921:232-233), manufactures were shipped to British North American branches of Pollok, Gilmour and Company by the parent firm in Glasgow, and/or bills of exchange taken by the branches to cover their expenses would be met by the parent firm upon maturity. The financial route for meeting such fiscal responsibilities was as follows: the branches of Pollok, Gilmour and Company in British North America would draw on Gilmour and Company, Montreal to meet their maturity of bills, and, in turn, Gilmour and Company of Montreal would depend on the parent

firm for the notes discounted. At times of financial pressure, Gilmour and Company of Montreal would rely on the parent firm's financial agent in New York - Maitland, Phelps and Company - to meet the notes it had discounted. Maitland, Phelps and Company would in turn draw from Pollok, Gilmour and Company of Glasgow's London account. This was the usual route for the transfer of funds, but we also find instances of one branch requesting monetary resources from another branch to cover its expenses. Take for example an excerpt from a letter of Allan Gilmour and Company of Quebec to Robert Rankin and Company of St. John on 6th June, 1838: "....To save drawing on Glasgow, I shall probably value on you for a little by and bye through the British North America Bank and the transfer can be made on account of whomever you please at a future time, but I think we shall not want much money" (U.N.B. Archives, Gilmour and Rankin Papers, MG4, Rep.).

Similarly, the Bronson and Weston Company which began operations in the mid-19th century, also relied on its offices in the United States for gold notes to meet its production operation (PAC, Bronson Company, MG28 III, 264 vols. 92 and 95). This reliance on money-capital by the Bronson and Weston Company from outside British North America is also supported by a section from the ledgers of

R.G. Dun and Company, (September 7, 1858)²² where we find this financial assessment of the Company: "they need but little local cr dealing principally with U.S. whence Capital is taken, ..." (Canada vol. 13, p. 184, R.G. Dun and Company Collection). Furthermore, the Company also relied on the assets of a bank in upper New York state, owned by the partners of the Company, to finance some of its operations (PAC, Bronson Company, MG28 III 26, vol. 716). Besides this internal self-financing, the Company also relied on its various customers in the United States to pay off its cost of production. The manner in which this was done was through an exchange of gold drafts for timber and lumber to be cut by Bronson and Weston (see for example PAC, Bronson Company, MG28 III 26, vols. 92-93). Such practices of obtaining advances from customers in exchange for timber and lumber to be cut was also present in the financial operations of the branches of Pollok, Gilmour and Company in the later part of the 19th century. For example, the communication on 11th April, 1885 of one of its branches, Gilmour and

²² The R.G. Dun and Company was a mercantile agency that was known for collecting, analysing and disseminating credit information to businesses. In 1933, it merged with the Bradstreet Company to form the Dun and Bradstreet Company which is now the largest and oldest mercantile agency in the world.

Company, with one of its customers, Bryant, Powis and Bryant, underlines such financial transactions:

"..... With regards to the last part of your letter, we think we would be in a position to use some advances from you about the 1st June next at 6% interest, we thank you in the meantime to let us know if your London firm could let us have about \$125,000. advanced to us on a/c of next seasons cut about the first June next, and if it would suit them as well, we would prefer this amount to be paid on the other side, that is in England."

Furthermore, it also seems that in addition to these routes of financing its production operations, the Bronson and Weston Company also relied on other banks in the United States for financing during the early stages of its operations in British North America. We discover this circuit of financing in one of the Company's letters dated May 6, 1861 to a customer in the United States: "We are depending upon you and the Whitehall Bank to help us along with our business here and you shall have the lumber as fast as we can make it" (PAC, Bronson Company, MG28 III 26, vol. 91).

It is very clear, therefore, that in the early stages of operations of these transnational concerns, the financial resources for funding their wood operations were from outside British North America. This was to change somewhat in the later periods of the 19th century whereby the bulk of the financial resources to mount their wood operations was secured locally through the financial

institutions in British North America.²³ Financial practices of this nature became quite common, especially for the wood operations of the branches of Pollok, Gilmour and Company. The reply of Gilmour and Company to the Quebec Bank on 2nd October, 1886, relates for us such a change in the location of the source of financing: "In reply to your favour of yesterday re. new advances for another year, we note that you will give us a credit up to \$400,000. at the rate of six percent per annum, our account to be kept as in the past, which we hereby accept" (PAC, Gilmour and Hughson, MG28 III 6, vol. 157). Loans and bank credits were utilized by these companies to fund their production operations and in turn they offered to the banks their timber limits, stock of manufactured or to be produced wood products, property deeds and insurance policies as collateral. These forms of financial transactions became more prevalent, and further evidence can be found in a letter by John Gilmour and Company

²³ Such a pattern of relying on local "capital" sources to finance their operations mirrors the financial practices of transnational enterprises operating in the world-economy of the 20th century. Constantine Vaitsos (1976), for example, reports that no less than 15% of the total financial needs of the U.S. based manufacturing subsidiaries abroad originated from U.S. sources for year 1973. And, in its economic survey of Latin America, the Economic Commission of Latin America (1970) of the United Nations, reported that multinational investments in Latin America did not constitute a net contribution of new capital; rather, they were derived from reinvestments, and from local capital markets.

to the Manager of the Quebec Bank on 25th September, 1890.

Dear Sir:

For the purpose of enabling us to get out Logs during the ensuing winter from our Limits and bring to market: Logs, deals, boards or Lumber. We desire to obtain the necessary advances from the Quebec Bank and in consideration of such advances we promise and agree to give to the Quebec Bank the warehouse or Cove Receipts or Bills of Lading for such logs or the produce of such logs consisting of Deals Boards or Lumber as collateral security for the payment of such advances being essentially the same understanding you had with the firm of Gilmour and Co. last year which is now being carried out by us with reference to last seasons saw milling business.

And we hereby agree to satisfy you from time to time that the business is progressing satisfactorily.

(PAC, Gilmour and Hughson, MG28 III 6, vol. 161)

Sine dubio, the nature of the financing of the timber and lumber operations by these transnational timber and lumber companies was complex. It is therefore not a simple process of financial exchange, although it might have this characteristic at the start; but rather one which reflects qualitatively similar complexity to the financial operations of the transnational enterprises of the 20th century.²⁴

²⁴ Compare this account of how the operations of the transnational timber and lumber companies were financed with Charles Tugendhat's (1971:150-163) review of the financing operations of 20th century multinationals. Securing local financing to mount their timber and lumber operations by the timber firms is also repeated in the style of financing foreign subsidiaries by multinationals in the 20th century (Phatak, 1971:83).

Besides utilizing varied sources and different ways of financing their own operations that changed over the course of the 19th century, these firms, because of their scale of operations, also provided their resources and financial connections and circuits for the use of smaller colonial timber houses in British North America. In return for the ships and wood products manufactured by these smaller colonial timber houses such as, for example, the Burchill lumbering firm, the New Brunswick branch of Pollok, Gilmour and Company, Glasgow provided manufactured goods plus credit and financial facilities for the Burchill firm to draw on to pay off its British accounts (Glendennings, 1978:42-73). The scale of these financial provisions to the Burchill firm by Pollok, Gilmour and Company was not small. Glendennings (1978:42) reports that for the years 1855-56, for example, the Burchill firm sent several shipments of deals totalling 3,019,122 to Pollok, Gilmour and Company's branch in Liverpool, England. At the same time, the Burchill firm received several shipments of manufactured goods worth £15570 from Rankin, Gilmour and Company, Liverpool (Glendennings, 1978:46). The use of the financial facilities of Pollok, Gilmour and Company by the Burchill firm to deposit and to draw on to settle its debts can be seen in the yearly balances the firm had with Pollok, Gilmour and Company. Glendennings (1978:73) has provided us with a lucid time series of this (see Table 4.5).

Table 4.5
Burchill Balance with Rankin, Gilmour and Company

Year	Balance
1 April, 1857	£ 5,756
31 Dec., 1857	3,250
1858	2,452
1859	1,562
1860	1,392
1861	\$ 5,980
1862	2,135
1863	2,890
1864	2,319
1865	3,733
1866	1,014
1867*	11,126
1868	6,926
1869	2,996
1870**	581
1871	359
1872	207
1873	283

- * According to Glendennings (1978:73), this large increase was the result of four deposits which the Burchill firm received from the sale of lumber to R.R. Dobell, a lumber merchant. For Glendennings, the Burchill firm "was obviously using Rankin, Gilmour and Company as a bank."
- ** This drop in the balance was a consequence of the Burchill firm relying less on the financial facilities of Rankin, Gilmour and Company in later years.

(Source: Glendennings, 1978:73)

The complex manner of funding these wood operations is complemented by the vast amounts of money-capital required to finance them, and the lengthy period before this capital outlay was realised. Because of the sparseness of the records of the companies for the early periods of the

19th century, it is difficult to estimate the level of money resources (money-capital) committed by these companies to their operations annually. Descriptive accounts such as that of John Rankin's (1921:232) indicate that the "capital" outlay for Pollok, Gilmour and Company's operations was considerable. Valuewise, we obtain a sense of the scale of this from the evidence presented by Allan Gilmour to the Select Committee on Timber Duties in 1835. According to Gilmour, the parent firm exported approximately £100,000 annually of manufactured goods to its branch houses in British North America to undertake timber and lumber operations (see Select Committee on Timber Duties 1835:236). For the early period of Bronson and Weston Company's operations in British North America, rough calculations show that the company drew \$90,000 from their sources in the United States (such as their offices, customers and the banks) to finance their wood operations between September to October 1868 (PAC, Bronson Company, MG28 III 26, vol. 93).

For the later period of the 19th century, the amounts utilized to finance the operations are larger. Approximately \$1,874,950. were required to produce 1,000,000 logs annually (PAC, Bronson Company, MG28 III 26, vol. 93). In the case of the financial outlay for a branch of the Pollok, Gilmour and Company, about \$400,000. was required for an annual winter operation (PAC, Gilmour and Hughson, MG28 III 6, vol. 157).

The voluminous outlay of money-capital for financing the start-up of wood operations is matched by the extended time period before these monetary investments were realized. According to Rankin, (1921:232), investments made in the fall of one year would not yield any actual cash return for about 15 to 18 months. At times, this period was extended to two years. Therefore, this suggests that the rate of realization of the monetary investments of the timber and lumber firms was extended over a long period of time and thus exposed these companies to greater economic risks. It also generated conditions for a greater financial dependency on banking institutions when the timber and lumber firms relied on these sources to fund their wood operations in the later periods of the 19th century.

4.2.2 Acquisition of Means of Production

The above monetary investments made by the timber and lumber firms were for the acquisition of the means of production, fees for stumpage and timber limits, food supplies for the lumber camps and labour to undertake production. In the early 19th century, the materials and supplies for productive operation were sent from Great Britain or imported from the United States. As John Rankin (1921:22) has informed us, in the early stages of the Pollok, Gilmour and Company's wood operations in British

North America, most of the necessary materials were sent from Great Britain. However, food items for the lumber camps, such as pork and flour, were purchased from the United States and, to a minimum extent, locally. We discover the Pollok, Gilmour and Company purchasing pork and flour from the United States (U.N.B. Archives, Gilmour and Rankin Papers, MG 4 Rep, File 20). Fernand Ouellet (1980(a):200), in his commentary on the timber operations of Lower Canada in the early 19th century has also discussed the heavy importation of food supplies from the United States. In New Brunswick, pork, oats, and tea were shipped into the provinces from the United States and Prince Edward Island (Wynn, 1981:73). Clearly, therefore, food and materials necessary for the conduct of wood operations were imported across national boundaries and linked into the production of timber and lumber.

The records we have examined confirm that throughout the 19th century, food, other materials and equipment were imported continuously across state boundaries for the wood production operations in Canada. We find telegrams and letters of the Armour and Company of Chicago to the branches of Pollok, Gilmour and Company in 1886 informing them of the delays in their ordered pork deliveries (PAC, Gilmour and Hughson, MG28 III 6, vol. 1). In the case of the Bronson Company, we find records of the firm buying beans in New

York from Messrs. Meiz and Knopp, and wagons in Concord, New Hampshire from L. Downing and Sons in 1857. Even until 1872, the Company was purchasing pork in Grand Rapids, Michigan, from L.H. Randall and Company (PAC, Bronson Company, MG28 III 26, vols. 91 and 716).

Notwithstanding these purchases from the United States, the timber and lumber operations were also supplied with food and materials grown and manufactured in Canada. There are entries of purchases of oats from farmers in Upper Canada by the Bronson Company in late 18th century (Trent University Archives, Canada Land and Emigration Company, Bronson and Weston Papers). By the late 19th century, Gilmour and Hughson Company was also purchasing pork in Canada from Thomas Lowry and Son of Hamilton (PAC, Gilmour and Hughson Company, MG28 III 6, vol. 54). In the Report of the Select Committee on the Current Depression (1876:6), we also find statements on the purchases of food and manufactured products such as axes in Canada.

The amount of food and materials that were required in the lumber camps for the conduct of wood operations is by no means of a limited scale. In the records of the Bronson Company (PAC, Bronson Company, MG28 III 26, vol. 94), we find that the food and material supplies required for the production of 1,000,000 saw logs were as follows:

- 1) 5,500 barrels of pork

- 2) 6,000 barrels of flour
- 3) 3,000 bushels of beans and peas
- 4) 250,000 bushels of oats
- 5) 2,000 tons of hay
- 6) 2,500 gallons of syrup
- 7) 50,000 pounds of teas
- 8) 12,500 pounds of soap
- 9) 40,000 pounds of tobacco
- 10) 20,000 grind stones
- 11) 500 boxes axes
- 12) 400 cross cut saws
- 13) 1,500 sleighs
- 14) 25,000 ropes
- 15) 10,000 chains
- 16) 300 boats
- 17) 6,000 pairs blankets

Notwithstanding the necessity to purchase some of the items for the wood operations, the timber and lumber companies also owned and operated farms to supply their lumber camps. This reflects some level of **vertical integration** of their production operations. In these farms, oats, wheat, horses, etc. were grown and reared. The Pollok, Gilmour and Company owned, it was reported, nine farms totalling 1500 acres (Canada Lumberman, November 30, 1880). The land from these farms produced about 50 bushels of wheat.

to an acre and it has been written that all the harvests from these farms were consumed by the workers of the firm (Lumber Trade of the Ottawa Valley, 1872:41-42). The Bronson Company also had farms for supplying their lumber camps (PAC, Bronson Company, MG28 III 26, vol. 716). In New Brunswick, where Joseph Cunard and Company had a huge timber operation, the firm also established farms near Bathurst to fuel its timber and lumber operation (Wynn, 1981:73).

Besides financing purchases for their wood operations, the timber and lumber firms also had to invest in the building of saw mills and allocating resources for their operations in the next stage of the production process: transforming the cut logs into lumber. The monetary investments for these mills were substantial and long term.²⁵

²⁵ The earliest mills built in British North America cost approximately \$2000 (Lower, 1928:586). In New Brunswick, capital investment in saw mills rose and reached a peak during the 1830's with mostly money-capital from the United States flooding the province to invest in sawmilling. A total of 200-230 mills were built worth £232,000. These mills account for most of the industrial capital investments in the province during the 1830's (Wynn, 1974:314). By 1831, it has been estimated that approximately 3800 men were employed in sawmills in the province and this number rose to 4300 men by 1850 (Wynn, 1974:300,307). The number of mills in New Brunswick by 1840 was about 574. However, this number fell to 500 by 1850. This drop occurred during a period of consolidation and competition, in fact, a B-phase of the world-economy. In Central Canada, the flurry of activities towards building saw mills took place in the mid-19th century. By 1861, the numbers of saw mills in Upper Canada and Lower Canada were respectively 1151 and 797. The capital investments in mills were \$5,180,901 (Footnote 25 continued next page)

Earliest records of the Pollok, Gilmour and Company investing in mill operations in eastern Canada are dated around 1830's (Wynn, 1981:126). These investments were reputedly the largest in eastern Canada (Wynn, 1974: 323). Because of the size of these investments it led the Scottish Field to remark that the firm had erected sawmills in British North America of a scale previously unknown (Rankin, 1921:28-29). For example, the mill at Newcastle, New Brunswick, owned by the branch, Gilmour, Rankin and Company of Miramichi had 24 reciprocating saws and two circular saws for cutting laths. In the case of the Bronson and Weston Company, the firm established its mill at the Chaudière in 1854-55 (Canada Lumberman, 1890; Lumber Trade of the Ottawa Valley, 1872:33-34).

Records of the costs of building and equipping the

for Upper Canada and \$2,776,248 for Lower Canada (Census of Canada, 1861). The total number of mills rose by 1871; however, this figure dropped by 1901.

**Number of Sawmills
Quebec and Ontario 1871-1901**

	<u>1871</u>	<u>1881</u>	<u>1891</u>	<u>1901</u>
Ontario	1837	1761	1895	1111
Quebec	1708	1729	1815	728

(Source: Census of Canada 1871-1901)

mills for the early period are scanty.⁹ We do know qualitatively that the investments were high in comparison to other standard mill operations in Eastern Canada. Bryan Latham (1957:136) has listed the cost of £15,000 for one of the mills owned by Gilmour, Rankin and Company in Miramichi. Investments by the company were heavier in Central Canada, and by 1852, approximately £58,843 were spent on sawmills and slides (Cross, 1968:153). In the later parts of the 19th century, we have a better approximation of money-capital invested in these mills. For example, from the amount of insurance in force for these mills, we discover that the branch of Gilmour and Company of Trenton owned mills that were worth \$119,000 (PAC, Gilmour and Hughson, MG28 III 6, vol. 136). Operating costs were quite high. According to Wynn (1981:126) hiring 170 workers for a mill of the firm amounted to \$15,000.

Supplies for the sawmills were imported mostly from Great Britain in the early 19th century. However, this changed after 1840, with most of the equipment for the mills being purchased from the United States, following increasing technical progress in that country (Lower, 1928:597). Power for the mills in the early period of the 19th century was derived from the streams and rivers to be replaced later by

steam power in the later parts of the 19th century.²⁶ As the 19th century progressed, the timber and lumber firms' mills were fitted with new technological innovations in mill techniques²⁷ (Hughson, 1964:72-73). These technical innovations were the introduction of the mulay and the circular saw to replace the upright saw; the two saw gang was substituted by a forty saw gang; and the double edged saw replaced the single buzz (Canada Lumberman, February 11, 1882). These saws were either imported from the United States or were manufactured in Canada. For this period, we also witness the enlargement of mills. Investments were also made to power them with steam and electricity. These technical innovations can be found in one of the mills owned by John Gilmour and Company in Hull, which was built in 1874

26 At the beginning of the establishment of sawmills the motive powers were wind, streams and rivers. After 1760, water replaced wind as the energy source for powering the mills, which was later replaced by steam (Lower, 1928:586). The first steam mill was built in 1822 in New Brunswick (Wynn, 1974:314). Technological innovations in sawmilling were made in the later parts of the 19th century, culminating in the introduction of the bandsaw in the 1890's which increased the total amount of lumber cut. The wide usage of electricity in the mills afforded the opportunity for night shifts.

27 The technology involved in the timber and lumber industry can be classified into four main areas:

- 1) the river-craft used by the loggers;
- 2) the tools used in the wood operations;
- 3) the mill;
- 4) the means of movement of the sawn lumber to the market.

(Hughson, 1964:59)

and had a capacity of 120,000 feet of lumber per day board measure. It had six gangs of saws, along with three slabbers and three stack gangs. There were also two lath machines with edgers and butters. Later in the 19th century (1883) after it was burned down, it was rebuilt and fitted with new band saws imported from the United States. Another mill owned by Gilmour and Company was described by the Canada Lumberman (1882) as follows:

"The new mill is 172 feet long, 85 feet wide in two stories. The engine house is 50 x 26 feet having twin engines of 1500 horsepower, the boiler house is 100 x 35 feet having 16 tubular boilers, smoke fumes entering two chimney stacks 120 feet high. Engines were made by MacDougal of Montreal and the boilers by three Toronto firms. The twin slabber saws were made by Wm. Hamilton of Peterborough and the single by Mr. Stearns of Erie, Pennsylvania. There are three immense gangs for cutting into boards. They will cut six logs at one time. The saws are supplied by Diston of Philadelphia and the belting by Hoyt of New York. The three circular saws and three gangs will cut 1/2 million feet in 11 hours....."

For the Bronson and Weston Company, a new modern mill was installed in 1871 that employed approximately 300 men (Gillis, 1975:26; Canada vol. 13, p. 258, R.G. Dunn and Co. Collection). As the century progressed, the ~~firm~~ owned two large sawmills, a carding and grist mill, and lath mills. Of the two sawmills owned by the company, one was large containing 2 stock gangs of 30 to 40 saws, 2 slabber gangs of 14 to 16 saws, 2 Yankee Gates with 32 saws, and the necessary edging and butting saws. The other smaller mill had 1 slabber gate, 1 stock gate, and butting and edging

saws (Lumber Trade of the Ottawa Valley, 1872:33-34).

These monetary investments in the building of sawmills and the adoption of technological innovations were also repeated by the other timber and lumber companies operating in Central Canada, especially in the Ottawa Valley. For example, J.R. Booth and Co. which established business in 1858 had mills that were fitted with several types of saws. These saws were three gangs of 40 saws, 3 slabber gangs containing 18 to 20 saws, 1 Yankee gate with 36 saws, 1 large circular saw, and a large number of circular saws for butting and edging (Lumber Trade of Ottawa Valley, 1872:34-35). This is also repeated by the firm of Perley and Pattee where its mills were fitted with 2 slabbing gangs of 20 saws, a single gate, and a re-sawing gate with the usual complement of circular saws for butting and edging (Lumber Trade of Ottawa Valley, 1872:39). Such an intensive use of milling techniques was also found in the mills of Hamilton and Company. The mills of this company had the reputation of being the largest in the Ottawa Valley with 101 vertical saws and 44 circular saws driven by 92 water wheels (Lumber Trade of Ottawa Valley, 1872:44).

Besides the investments in the sawmills to undertake production of sawn lumber, these companies had to invest in transportation to convey the timber and lumber to the markets. In the early history of the timber and lumber industry

(i.e., late 18th and early 19th centuries), - when Great Britain was the main consumer of wood products produced in British North America - sailing ships²⁸ were the main investments made by these companies to transport their products to British ports. Later in the 19th century these investments in transportation shifted to railways, after the United States became a major consumer of wood products manufactured in Canada.

With the opening of the branch of Pollok, Gilmour and Company in Miramichi, New Brunswick in 1812, we note the firm investing in shipyards and building ships in St. John (Ross, 1933:9). By 1818, one of Pollok and Gilmour's branches, Gilmour, Rankin and Company had also established yards in Douglastown, New Brunswick (Ross, 1933:39). Shipyards were also established by the firm's branch in Central Canada, Allan Gilmour and Company in Quebec (Rankin, 1921:91).²⁹

²⁸ According to Helen Cowan (1927:146), after 1815 almost one-third of the total tonnage of British shipping was made up by ships carrying timber. By 1820, timber vessels transporting wood from the colonies of British North America amounted to one-seventh of the whole British carrying trade.

²⁹ Shipbuilding as an economic activity is by no means a preserve of the timber and lumber companies. According to Fernand Ouellet (1980(a):508), the tonnage of ships built in Quebec rose from 17,122 tons in 1838-42 to 30,524 tons by 1848-52. Bryan Palmer (1983) reports by 1825 that 3350 workers were employed in Quebec City alone in shipbuilding and between the years 1809 to 1854 almost one-quarter to one-half of the male work force of Quebec City were employed in this activity.

The Scottish Field (10 November, 1910) reported that in 1824, the firm of Pollok, Gilmour and Company had built the Marchioness of Queensbury at its St. John yards that was by far the largest in the trade. By 1824, the firm had built 78 vessels for ferrying the timber and wood to Great Britain. According to Rankin (1921:311), the total tonnage of the ships owned by Pollok and Gilmour, "exceeded that of any contemporary firm in England or Scotland". This pace of shipbuilding continued unabated throughout the 1830's to 1840's by which time the ships owned by the firm numbered 100 vessels (Rankin, 1921:22). This number increased to 406 vessels between 1845 and 1856 (Lower, 1928:247). By 1857, the R.G. Dunn and Company (Canada, vol. 13, p. 186) reported that the firm of Pollok and Gilmour owned the largest fleet of vessels in British North America. This was further confirmed by the St. John newspaper which reported that between 1825 to 1840, the shipyards of the branch, Gilmour, Rankin and Company turned out a large number of vessels averaging 300 to 500 tons. The registration of ownership of these ships was either in the name of the parent firm or one of the branches. In Table 4.6, we provide a partial list of ships owned by Pollok, Gilmour and Company in 1832. Louise Manny, in Ships of Miramichi and Shipbuilding in Bathurst, also provides a list of ships owned by two branches of Pollok, Gilmour and Company: Rankin, Gilmour and Company; and Ferguson, Rankin and Company (see Tables 4.7 and 4.8).

Table 4.6

Ships Owned by Pollok, Gilmour and Company

Name of Ship	Tonnage	Captain
1) Ant	582	Jaime Pye
2) Auro	523	John McFarlane
3) Bee	578	James Robertson
4) Carleton	534	Thos. Callender
5) Faside	573	Alexander McArthur
6) Forth	426	Robert Hunter
7) Intrinsic	407	Hugh Smith
8) Joanna	556	John Kerr
9) Margaret Pollack	505	Alex Drysdale
10) Mariner	312	John McDonald
11) Miramichi	582	Robert Hutcheson
12) Oxford	389	J. Davidson
13) Quebec	587	M. Baxter
14) Rankin	576	Alex Mitchell
15) St. John	573	Alex Nicol
16) Wolf's Cove	593	Peter Hamilton

(Source: UNB Archives, Gilmour and Rankin Papers, MG 4 Rep.)

Table 4.7

**Ships Owned By Rankin, Gilmour and Company
Miramichi, New Brunswick**

Name of Ship	Tonnage	Dimension	Date Built
1) Anne Laurie	745	156'x32'x19'	1857
2) Belle of the Ocean	647	156'x31'x18'	1857
3) Cyclo	647	146'x30'x17'	1851
4) Doria	140	93'x25'x9'	1859
5) Envry	425	127'x26'x15'	1860
6) Flower of the Forest	937	170'x34'x21'	1860
7) Garibaldi	825	156'x33'x21'	1860
8) Helena	287	105'x25'x21'	1862
9) Icon	341	134'x28'x12'	1863
10) Jennie Deans	290	-	1863
11) Jura	251	118'x25'x12'	1863
12) Kathleen Mourneen	471	136'x30'x16'	1864
13) Lenore	1280	197'x38'x23'	1865
14) Mary Elizabeth	732	162'x32'x18'	1865
15) Non Confederate	347	125'x29'x12'	1865
16) Oberlin	263	109'x26'x12'	1865
17) Panther	222	135'x28'x14'	1866
18) Queen of Beauty	176	99'x24'x22'	1867
19) Rolling Wave	-	-	1867
20) Teazer	-	80'x19'x5'	1868
21) Unicorn	-	-	1868
22) Vigilant	-	-	1873

(Source: Manny, 1960:76-84)

Table 4.8.

**Ships owned by Ferguson, Rankin and Company
Bathurst, New Brunswick**

Name of Ship	Tonnage	Date Built
1) Gipsev	171	1851
2) Algeria	540	1854
3) Ceylon	600	1858
4) Nile	635	1861
5) Neva	242	1862
6) Gipsy	80	1862
7) Punjaub	594	1863
8) Light Cliffe	470	1864
9) Ceres	334	1865
10) Marathon	1176	1866
11) New Era	213	1867

(Source: Manpy, 1965:47)

Post 1865, we discover the firm investing in, the building of iron ships and before the 19th century was over, there was a change from sailing ships to those that were steam-driven³⁰ (Queen's University Archives, Arthur Lower Collection, Metropolis and Hinterland). In addition to investments in ships for transporting the timber and wood, barges and smaller boats were also purchased. They were used to facilitate the transportation of the timber and wood for loading onto the ships or for towing along the canals to the United States. The Lumber Trade of the Ottawa Valley

³⁰ In 1876, the Plimsoll Act in Great Britain became law and with the passage of this Act, old seaworthy sailing ships were replaced. In fact, by 1880 more than three-quarters of the ships transporting timber to Great Britain from Canada were steam-driven (Latham, 1957).

(1870), also confirmed such purchases by the timber and lumber companies. For example, the Bronson and Weston Company owned 26 barges and four steam boats, that employed a total of 222 men in the operation of these vessels (Lumber Trade of the Ottawa Valley, 1870:33-34).

In the late 19th century, railways became a major form of transportation, especially when the United States became a major consumer of wood manufactured in Canada. Informed sources of the period, such as the Canada Lumberman, have indicated an extensive use of railways, such as the Canadian Pacific and the Canada Atlantic Railway, for the transportation of the timber and lumber by the companies. Although, there is no evidence of the firms of Pollok, Gilmour and Company, and the Bronson and Weston Company investing in the building of railroads, this type of investment was made by other large timber and lumber concerns. For example, the firm of Perley and Pattee (which started operations in the Ottawa valley at about the same time as the Bronson and Weston Company) invested in the building of the Canada Atlantic Railway. The firm's owner, Mr. W.G. Perley, according to the Canada Lumberman (February 1, 1884) was one of the principle directors of the railway. Also associated with the building of this railway was the timber and lumber firm of J.R. Booth (Lower, 1938:167). Besides the investment in the Canada Atlantic Railway, another timber and

lumber firm, E.B. Eddy, was reported to have built a double-track railway from its mills to the piling ground where the timber and lumber were shipped to markets (Lumber Trade of the Ottawa Valley, 1870:35-37).

Further to these investments in sailing ships and railways for transporting the timber and lumber to the markets during the procurement phase, there were also investments in the purchase of land for stacking and preparing the wood products for shipment. For the timber and wood that were being shipped to British ports, land near the shipping ports was purchased. Usually sheltered coves and inlets were chosen. In Pollok, Gilmour and Company's case, the branches such as Gilmour and Company established yards at Wolfe's Cove, which required an investment of £10,000 and employed 150 men (Latham, 1957). A deep water cove, Indian Cove, was also purchased by Allan Gilmour and Company at Quebec (Rankin, 1921:91). These acquisitions of land and the means of production formed a major outlay of money-capital by the timber and lumber firms during the procurement phase. The other major necessary element for the production process was the purchase of labour-power. It is to this that we now turn.

The type of labour-power procured for the production of timber and lumber products varied. Mainly it was either

contract or wage workers.³¹ The former, known as 'jobbers' in the industry, were often settlers who worked on a piece of timber limit that the timber and lumber firms owned but did not exploit (Lower, 1938:35). The social relations of production comprise of the timber and lumber firm advancing as credit to these 'jobbers' all the necessary items for production. These items included all the technical means to cut the trees, as well as food and other supplies required for sustenance. In return for this contractual relationship, the jobbers provided the timber and lumber firm with wood to clear the debt incurred. According to Hughson (1964:101), jobbers did not make much profit. In fact, the benefits of the exchange were to the timber companies. This occurred at two moments of the exchange. The first being that the goods supplied to the jobbers by the firms were priced according to the profit margin expected by the firms for the sale of the goods in the market place. The second moment occurred with the profit of the sale of the wood provided by the jobber in European and American markets. In this regard, the Pollok, Gilmour and Company's export of

³¹ We are assuming that wage labour is not the only feature depicting productive relations in capitalist production. Various types of labour relations distinguished by forms of labour control such as contract, debt bondage, etc., are utilized in capitalist production processes (Wallerstein, 1974, 1979(a); Frobel et al, 1980(a)).

manufactured products from Great Britain to its branches in British North America to fuel the branches' lumber camps, as discussed earlier, was also a means of providing 'advances' to jobbers (Select Committee on Timber Duties, 1835:236).

The use of jobbers was one of the typical ways to procure labour power for wood operations. It occurred widely in New Brunswick and in Central Canada (Wynn, 1981; Lower, 1938). The production records of the Bronson and Weston Company reveal entries of logs supplied by jobbers (PAC, Bronson Company, MG28 III 26, vol. 94). In their records, we find letters indicating advances made by the Company to jobbers.

"Mr. Boyd wishes to get some supplies from us and as we make it a rule not to supply any jobbers only on an order from headquarters as we would like to know if you are willing to give him an order for what he wants. We are no more afraid of him than anyone else but he is satisfied to have it so and we want to do a sure business and by your limiting your order till you see how he gets along you will run no risk please reply by return mail and oblige."

(Trent University Archives, Bronson and Weston Company, Papers in Canada Land and Emigration Company)

Burton Glendennings (1978:99) has also indicated that the Burchill firm, operating in New Brunswick, utilized jobbers for the production of logs. It should be noted that this labour-capital relation is not a facet of an early period of the timber industry, as it occurred repeatedly throughout the whole period of the 19th century (as evident in the

production records of the firm of Bronson and Weston (PAC, Bronson Company, MG28 III 26, vol. 94) and as discussed in Arthur Lower's (1938:35) the North American Assault on the Canadian Forest).

The other type of 'labour-power' utilized by the timber and lumber companies was wage labour. It was procured for their wood operations and for the lumber mills. This social relation was sealed with the signing of a work contract between the worker and the company (PAC, Gilmour and Hughson, MG28 III 6, vol. 149). Additionally, seasonal wage workers were hired in the winter, such as farmers who were employed along with their horses and oxen to help in the winter drive of the logs (Wynn, 1981:96; Cross, 1968). In fact, it has been suggested that these farmers kept the wages of the ordinary workers low because of their availability for work during the winter months (Pentland, 1981:178).

The sources of supply for these wage workers were primarily from the British Isles and Lower Canada. French Canadians were hired from the rural milieu of Lower Canada, though their absorption into this staple trade was not as high as that of the Fur Trade (Ouellet, 1980(a):356,389). It has been estimated that almost 6,000 French Canadians were employed in the Ottawa valley in 1851 for the timber and lumber industry (Ouellet, 1980(a):506). The immigrants from the British Isles, especially those from Scotland and

Ireland made up a majority of these workers (Gillis, 1978: 116-117; Hughson, 1964). Lower (1928:466) has estimated that in 1835, 1500 Irish were employed in the lumber trade in Quebec. Native Indians as well were hired for the timber camps (Cross, 1974:56).

In the Census of Canada for years 1871-1891, the number of lumbermen employed by the industry among the provinces varied over the three decades. Table 4.9 provides a breakdown of the number of men hired as lumber workers.

The wages for these workers differed according to skills and level of seniority. In 1850, a foreman working in the woods of Upper Canada would be paid £5 (approximately \$20.) per month, including board, and a shantyman £2 10s (approximately \$10.) per month, including board (Curtis,

Table 4.9

Number of Lumbermen* employed in Canada by Province
1871 - 1891

	1871	1881	1891
Ontario	1929	2007	4033
Quebec	5834	3984	4181
New Brunswick	1239	866	1240
Nova Scotia	<u>928</u>	<u>906</u>	<u>1512</u>
Total	9930	7763	10966.

Note: *The Census uses the term lumbermen. We are assuming in this case that these were men employed for wood operations. (Source: Census of Canada: 1871-1891)

1981:42). By 1886, it was reported that a foreman was paid \$40. to \$60. per month, including board and a shantyman would be paid \$12. to \$50. per month depending on the type of work (Canada Lumberman, November, 1886). Table 4.10 illustrates the breakdown of wages for workers in the timber and lumber industry in Upper Canada. In New Brunswick, the wages were comparable to Upper Canada; Table 4.11 illustrates the scale for the year 1888.

Table 4.10

**Wages of Workers in the Timber and Lumber Industry
Upper Canada, 1886**

Type of Worker	Wage per Month
Foremen in Woods	\$40. - \$ 60.
Choppers and Skidders*	\$15. - \$ 20.
Road Cutters	\$12. - \$ 15.
Teamsters and Loaders	\$16. - \$ 18.
Cooks	\$30. - \$ 40.
Log Measurer	\$45. - \$ 50.
Horse Team and Teamsters	\$35. - \$ 40.
Mill Foremen	\$35. - \$100.
Head Sawyers for Gangs	\$40. - \$ 45.
Head Sawyers for Circulars	\$40. - \$ 60.
Tail Sawyers	\$30. - \$ 35.
Edgers and Trimmers	\$35. - \$ 40.
Filers	\$50. - \$ 60.
General Help	\$30. - \$ 35.

(Those labourers working in the woods had their room and board paid for by the timber and lumber company)

*A skidder is a worker who hauled logs over short distances with oxen and horses.

(Source: Canada Lumberman, November 1886)

Table 4.11

**Wages of Workers in the Timber and Lumber Industry
New Brunswick, 1888**

Type of Worker	Wage per Month
Gangman Head	\$36. - \$38.
Headcircular Men	\$33. - \$36.
Filers	\$48.
Engineers	\$48. - \$60.
Lathmen	\$31.

(The wages are given in per diem rates; 10 hours are quoted to be the length of work. The above wage rates were calculated using an average of 60 hours per work week.)

(Source: Canada Lumberman, June, 1888)

The magnitude of the number of workers employed by the timber and lumber industry in all phases of their production operations was enormous, if we compare it to the total adult population of the provinces. For example, in New Brunswick, between the years 1824-25, almost one-third of the adult population of the province was involved in lumbering (Wynn, 1974). Costwise, in terms of wages paid, the amount was substantial. For example, it was reported that Gilmour and Company, a branch of Pollok, Gilmour and Company, annually paid in wages \$275,000 to \$300,000. At the Company's stacking yards over 150 men were employed for just that phase of the operation. It has been estimated that the Company hired 1,000 men in the winter and 500 men in the summer for all their operations. The Scottish Field

of 1910 has quoted that Pollok, Gilmour and Company's operations hired 15,000 men for its operations in British North America (Rankin, 1921:28-29). Inspection of the records of the Company indicates that at the Gatineau mills of John Gilmour and Company, 230 men were hired in 1885 with wages according to the type of work (see Table 4.12).

The firm of Bronson and Weston had a similar scale of operations in terms of the amount of men hired and wages paid. Gildis (1975:26) has indicated that Bronson and Weston hired 300 men for their mill operations. In the Company records, the wages paid to all its workers were \$3,000 per week. In these records, we find an indication of the Company's average expenditure and number of men utilized

Table 4.12

**Wages of Workers at Gatineau Mill of Gilmour and Company
June, 1885**

Type of Worker	Wages per Month
1) Blacksmith	\$42.00
2) Assistant Blacksmith	\$30.00
3) Mill Foreman	\$40.30
4) Carpenter	\$28.00
5) Filer	\$40.00
6) Boom Foreman	\$34.00
7) Culler	\$33.00
8) Millwright	\$58.50
9) Teamster	\$24.00
10) Boom Hands	\$24.88
11) Millman	\$26.45
12) General Hand	\$25.14

(Source: PAC, Gilmour and Hughson, MG 28 III 6, Vol. 409)

for its operations (see Table 4.13).

Besides the money-capital required for wage payments, the timber and lumber companies had to secure timber berths or limits for their operations. These berths or limits, which were under State ownership, were granted as leases by the State to companies or persons to conduct

Table 4.13

**Rough Memorandum of Employment Afforded by
Messrs. Bronson and Weston**

450 men making logs during winter, including wages and board. Supplies having to be taken into the lumber regions of the interior at a very heavy expense. Cost per day, per man \$1.50 for six months:	\$105,300.
Teams including wages and board of teamsters, hay, oats for horses, average 300 teams for 3 months at \$4.00 per day:	93,600.
Driving logs during spring and summer, average 300 men for 3 months at \$1.50 per day including board:	30,900.
Millwork, Piling lumber 300 men for six months:	<u>70,200.</u>
Total annual expenditures for wages, board for men, feed for horses:	\$300,000.
Besides the above, the Establishment employs during summer 36 barges with 5 men each, and 4 steamboats with 9 men each, in all 222 men for 6 months:	<u>51,948.</u>
Making the total annual expenditure for wages and board including teams and teamsters:	\$351,948.

(Source: PAC, Bronson Company, MG 28 III 26, Vol.94)

timber operations legitimately. A fee was charged by the State for the timber leases, and dues were also collected on the amount of timber taken from these leases. In the mid-19th century in Central Canada, the prices of these limits usually ranged from one dollar to a dollar and a half per square mile and they averaged about 10 square miles in size. For the dues, the cost for the logs cut was half a penny per cubic foot of square timber or for each standard log measuring twelve feet by twenty-one inches (Lumber Trade of the Ottawa Valley, 1870).

In the early period of the 19th century (1836-37), the firm of Pollok, Gilmour and Company's branches in New Brunswick leased 27% of the timber limits available. These limits stretched from the Cairns and Dugarvon Rivers in the south and west to the Pokemouche River in the north-east. By 1847, the branches of Pollok, Gilmour and Company with another timber firm, Joseph Cunard, held almost 40% of New Brunswick's licensed area for timber limits (Wynn, 1981). In Central Canada, the firm was the largest limit holder by the end of the 1840's. Gillis (1978:109) has listed the firm as having timber limits that totalled 4,042 1/2 square miles. Towards the end of the century (1889), the firm's records revealed the leasing of 3,486 1/2 square miles and payments of \$10,458.45 for the leases (PAC, Gilmour and Hughson, MG28 III 6, vol. 76). (See Figure 2.) For the

Figure 2

**Timber Limits Leased by Pollok, Gilmour and Company,
Central Canada, 1880**

(Source: Hughson, 1964)

years 1888-1889, the firm had to pay saw log dues of \$61,350.92 and \$8,040.50 respectively (PAC, Gilmour and Hughson, MG28 III 6, vols. 21 and 76). In the case of Bronson and Company, we find the Company leasing 1,249 3/4 square miles of timber limits in Quebec and 964 square miles in Ontario (PAC, Bronson Company, MG28 III 26, vol. 765).

Such large scale leasing of timber limits by the two timber and lumber companies we have researched are by no means atypical. The Canada Lumberman (November, 1890) has published the size of limits leased by the timber and lumber companies operating in Quebec and Ontario in 1890. Table 4.14 outlines the size of these limits and shows that leasing large timber berths were the operational features of the timber and lumber companies operating in Canada in the 19th century.

So far, we have discussed the heavy **monetary investments** made by the timber and lumber companies to acquire timber limits and other necessary means of production in order for them to conduct their timber operations. Maintaining these conditions for production was not only the responsibility and interest of the timber and lumber companies; the State also played a significant role in facilitating this phase of the accumulation process. It is to this that we turn next.

Table 4.14

**Size of Limits Leased by Timber and Lumber Companies in
Quebec and Ontario - 1890**

Name of Firm	Area (Square miles)
Quebec	
John Charlton	222.50
Gillies Bros.	696.75
Perley and Pattee	850.50
J.R. Booth	1,424.00
E.B. Eddy	592.25
Bronson and Weston	1,321.25
W.C. Edwards	415.00
Gilmour and Company	3,486.00
Ontario	
Gillies Bros.	72.50
McLachlan Bros.	967.00
Perley and Pattee	955.00
Bronson and Weston	971.50
J.R. Booth	1,370.25
E.B. Eddy	229.25

(Source: Canada Lumberman, November, 1890)

4.2.3 State Activities

Introduction

Before Confederation (1867), the British Imperial State was the omnipotent institution in Canada. The establishment of Executive Councils under the leadership of the British Military Commander or Governor in the early period of the country provided the legalistic avenue whereby British imperial interests could be implemented and ensured. Democratisation of the political process ensued with the

establishment of institutions such as local Legislative Assemblies. However, by no means were the relations between these Legislative Assemblies and the Executive Councils amicable and civil. The history of their relations was punctuated with disputes and protests (for example, see Ouellet 1980(b) for the case of Lower Canada). Besides these disputes, the local Legislative Assemblies and Boards of Trade often protested directly to the British Parliament over Acts passed by the British Government. A case in point is the series of bills concerning the passage of the lowering of tariffs on imported foreign wood into Great Britain in the 1840's - 1850's. With Confederation in 1867,³² the State gained a Canadian hue though its practices and activities continued along the same lines as previously carried out by the British State.

Even before the start of the procurement phase of the accumulation process, the State is involved in engendering the necessary conditions for capitalist accumulation and practice to develop in early Canada. Or, to put it in

³² Quebec, Ontario, New Brunswick and Nova Scotia were the four provinces which formed the union in 1867. Prince Edward Island joined the union in 1873 while Manitoba and British Columbia joined in 1870 and 1871 respectively. Saskatchewan and Alberta were colonies of the Dominion until 1901. Newfoundland joined Confederation in 1949.

another manner, the creation of a "capitalist environment".³³

In this case, the institutionalization of legal ownership of forest resources through Acts and selective legislations underlines the part played by the State historically in generating the necessary environment for capitalist accumulation. With State ownership of timber lands, access to these forested areas was controlled and thus structured the conditions whereby labouring people would be confronting the land as a condition of production.³⁴ In cases where lands were apportioned to British subjects, the retention of the rights to mineral and wood resources of

³³ Ivan Berend and Gyorgy Ranki (1982:59), in their discussion of the European periphery between 1780-1914, have argued that the State's most important role historically has been the "creation of a capitalist environment" and the institutions corresponding to capitalist social relations.

³⁴ In this context, Marx's comment in the Theories of Surplus Value on state ownership of land as being an important functionary process in the reproduction of capital is apt. Land, for Marx (1968(b):44), should confront the labouring class as a condition of production and the purpose is fulfilled "if it becomes state-property, i.e., if the state draws the rent." For us, this means that the state is an important element in the reproduction of capital as it reinforces and provides the necessary conditions for capital accumulation to occur.

these lands by the Crown was a common feature.³⁵ Let us examine a deed for a land grant of 100 acres given to a settler, John Le Breton, in the township of Hentley, Upper Canada, on 24 February, 1824:

"To have and to hold, the said particular tract of Land, hereby given and granted to him the said John Le Breton his heirs and assigns for ever; saving nevertheless, to US, our Heirs and successors, all Mines of Gold and Silver that shall or may hereafter found on any part of the said parcel or tract of land hereby given and granted as aforesaid: and saving and reserving to US, our Heirs and successors, all white Pine trees that shall or may now or hereafter grow or be growing on any part of the said parcel or tract of land hereby granted as aforesaid."

(Source: PAC, Lebreton, 1824)

Such acts therefore ensured the conditions for capitalist accumulation to develop³⁶ and *pari passu* protected the legal and financial rights of the State and Crown. In the latter instance, the intent was to protect the rights of the State and Crown and to receive a sizable share of the

³⁵ According to H.V. Nelles (1974:6), the control over Canadian resources by Great Britain was made even more explicit by Lord Dorchester, when in 1791 he gave instructions, that authorities in London expected the state to exercise more effective control over natural resources than had been the case in the American colonies.

³⁶ Besides controlling access to the timber lands, the State, as we have discussed in Chapter 2, also ensured the conditions of capitalist practice through the reservation of trees for the Royal Navy, thus allowing for the maintenance of a strong navy to protect British overseas trade on the sea routes and British imperial (Footnote 36 continued on next page)

income generated to pay for the State's own expenditure and administration.

The institutionalization of legal ownership of forested lands by the State was the initial step in engendering and structuring the conditions for capitalist accumulation. The introduction of regulations and laws by the State over access to forested areas and rights to harvest the trees, legitimated and protected the wood operations of the timber and lumber companies operating in Canada in the 19th century.³⁷ It prevented undue plundering of the forests by settlers and regulated access to the timber limits. As

power. Ownership of pine trees for its own use is highlighted by an order of the British Government to Governor Guy Carleton:

It is our will and pleasure, however, that no grant be made of any lands on which there is any considerable growth of white pines fit for masting for our Royal Navy, and which lie convenient for water carriage, but that you do cause all such lands to be set apart for our use, and proper regulations made and Penalties inflicted to prevent trespasses on such tracts, and the cutting down and destroying the trees thereon.

(A History of Crown Timber Regulations, 1899:35)

37. Like Evgeny Pashukanis (1978:74), we conceive of the laws and the legal system in capitalist societies as capitalist social relations (class relations). For this matter, legal relations in capitalist social organizations substantiate and regulate economic exchanges. Therefore, capitalist legal relations in the realm of the economy reflect and protect capitalist economic relations. For a historical materialist interpretation of the development of law and the rise of Capitalism as a mode of social organization see Tigar and Levy (1977).

well, it provided revenues for the State from the duties imposed for access to the timber limits. At times, these regulations enabled the concentration of the rights to the timber limits in the hands of a few timber and lumber companies over those of the smaller independent operators, as was the case in New Brunswick in 1835.

In the early part of New Brunswick's history (18th century), its forests were under the control of Britain and were protected by Imperial regulations of the Statute of 1729, administered by the Surveyor-General of the Kings Woods. These regulations prohibited the felling of pine trees without an approved contract. According to Wynn (1974:126), the Surveyor-General of the Kings Woods was instructed to establish reserves before the Governor of New Brunswick was allowed to allocate land to arriving immigrants and exiles. Even though there was apportionment of land to arriving immigrants, the State's rights to all timber on these lands were maintained. By 1816, this control was transferred to the New Brunswick Administration, which continued to rely on Imperial regulations to guide its action. The concern to preserve naval timber for Great Britain's use remained. Even though there was a geographical transfer of jurisdiction, the title to the forests continued to remain the property of the British State.

This control and ownership of the timber lands of

New Brunswick by Great Britain is further revealed when we examine the powers and responsibilities bestowed by the Colonial Department of Great Britain on the Commissioner of Crown Lands in New Brunswick who was a British Government appointee.

Instruction Issued to Thomas Baillie (Commissioner of Crown Lands in New Brunswick), Downing Street, May 1st 1827

1. Ascertain, on receipt of this despatch, nature and particulars of Crown property in Province under

- i) unsurveyed land (waste).
- ii) Surveyed but ungranted waste-land.
- iii) ungranted lands and Crown Reserves in districts where grants have been made.
- iv) Lands granted on perpetuity of Quit Rents. Lands granted on leases of series of years

(Annual report of progress in these inquiries, i.e. to Secretary of State or Commissioner of Treasury and the Government)

2. Annual report to Government regarding

- i) Total quantity of Crown Property, in districts where it has been ascertained.
- ii) Quality of that which might be put up for sale in the following year.
(Always assuming that it contains no timber held for Navy - - if so, that it has first been cleared out.)
- iii) Upset price per acre.

3. Manner of Sale: -

- i) Publish in Gazette or any other means by which it is brought to the public notice
- ii) Time, place and upset price
- iii) Sale to highest bidder.
- iv) If not offer at upset price, - - - reserve for later sale.

4. No lot larger than 1,200 acres. Price to be paid in four instalments (no interest), - -
- first on gaining possession, following three in successive annual payments.
5. If instalments not paid - - - deposit forfeited and land named for sale again. Payments taken by annual Quit at 5% per annum. First to be paid in advance. Again if failure - - - to revert to sale. N.B. This in case where purchases do not exceed 200 acres.
6. Above to be paid over twenty years - - largest to be four instalments at a time. Again if failure then can be resold.
7. Debtors of Quit Rents to be published in each district and if not paid by time of sales of following year. - - to be first to head auction list.
8. No land to be granted except at current sales except to poor settlers who have not been in the Province more than six months.
9. Any unsurveyed land that is settled, - - - occupants to be given seven years grace, then to take up some conditions of granted lands.
10. No patent to be issued, nor transfer allowed until full amount paid. This to be paid to you or your appointed Deputies.
11. Give notice of your power to collect Quit Rents, - - to commence from January, 1827.
12. Grant fees to be paid by purchaser. - - - Lieutenant Governor to determine amount to be paid by licensee.
13. i) January 1st and July 1st
 - a) Render complete amount of sale to Auditor General of Province
 - b) Complete and account - - - received and expended.
 ii) January 1st, April 1st, July 1st and October 1st - - - surrender to Receiver General all excess you hold, except £500 for expenses.

Signed BATHURST

Besides structuring the conditions for capitalist accumulation, the regulations and laws also provided a channel for the State's revenue. Monetary returns were obtained by the State through the auctioning of timber limit licenses, and a tonnage fee was charged by the State to police the limits. In 1818, this tonnage fee was 1s per ton. Throughout New Brunswick's early history, this method of generating revenues for the State was punctuated with repeated conflicts between the local Assemblies and the British State. Two instances provide evidence of the checkered relations between the local Assembly and the British State, whereby the British State exhibited an imperialistic and autonomous function - though it reversed its stance in one incident following severe political lobbying. The first was the imposition of a tonnage fee on all timber licenses by then Lieutenant Governor Smyth on 27th March, 1818. As a result, the local Assembly protested over this imposition of a tonnage fee but was informed that it was within the domain of the Crown to demand whatever it deemed fit. The second incident revealed an instance of the hegemonic power of the British Imperial State. In 1824, the British Government decided to tighten further the Colonial Office's control over Crown revenues of the province of New Brunswick. To do this, Commissioners of Crown Lands were appointed for British North America with their salaries to be derived from

the Civil Lists of the Provinces. These Commissioners were responsible for policing the forested lands and collecting the revenues. Following instructions from Great Britain in 1837, the Commissioner of Crown Lands in New Brunswick raised the tonnage fee from 1s to 1/3d per ton. Such increases were met with protest from the Local Assembly. A Committee of Grievances was established and it presented the local complaints to the British Government. However, their protests went unanswered with the tonnage fee again being raised two years later to 2s. To further increase revenues, 5-year leases of timber limits were made available by the British State and sold by public auction. To this effect, 247,000 acres were sold in 1839. However, following repeated delegations of the New Brunswick Local Assembly to London, the control of the provincial timber lands was later returned to the province, provided that New Brunswick agreed to finance its own governmental expenses.

The awarding of five year leases of timber limits after 1835 by the State provided the opportunity for the concentration of 'ownership' of these limits by large timber and lumber companies because the fee had to be paid for five years even though the timber was not cut from the limit (Wynn, 1981:130). Such policies excluded the smaller timber and lumber concerns, for they could not afford to pay leases which lasted five years. As a result, it has been estimated

that over half of the 5,500,000 acres of licensed timber lands were held by 14 large operators including one of the branches of Pollok, Gilmour and Company (Wynn, 1974:173).

The sales of timber licenses in New Brunswick continued throughout the 19th century. Over a ten-year period in the late 19th century, the areas of forest lands issued under licenses averaged approximately 3,356 square miles per year. Table 4.15 presents a time series of the amount of forest lands awarded to timber operators in New Brunswick from 1870-1880:

Table 4.15
New Brunswick Timber Licenses Issued
By Year

Year	Area (square miles)
1870	2604
1871	2680
1872	3223
1873	3622
1874	3651
1875	2845
1876	3332
1877	2938
1878	3484
1879	2902
1880	3017

(Glendennings, 1978:92)

In Central Canada, this pattern of State activities was repeated. The Military licensing system was supplemented

in 1828 with regulations to license timber limits that specified the amount of timber to be cut on each limit. These licenses were valid for nine months and were sold at the public auction. Gillis (1978) and Nelles (1974) have commented that this system of licensing was aimed to reduce small timber and lumber operators and to promote large scale operations. In a way, the effects of these regulations paralleled the five year licensing limit of New Brunswick introduced in 1835, by encouraging concentration of limits in the hands of major operators. By 1851, a ground rent system was established which charged 2s 6d per square mile. Under this system the rent would increase if the lumberman possessing the limit did not cut the minimum amount of timber required. For Gillis (1978:253-254), this establishment of a ground rent system further increased the monopolization of the timber limits.

As in New Brunswick, the State's revenues in Central Canada from the sale and collection of ground rent from these limits were of a significant magnitude. The dues collected from timber cut in Upper Canada for 1826 were \$10,162. By 1831, these dues reached \$40,090 and subsequently reached \$57,209 by 1836 (Gillis, 1978:233). Timber revenues collected by the government of Ontario were £22,270 for 1848 and reached £30,318 in 1851 (History of Crown Timber Regulations, 1899:82). According to Nelles (1974:18),

total forest revenues for Ontario between 1858 to 1866 were \$350,000 annually. Pross (1967:39) has provided a time series of the percent of timber revenue that the province of Ontario received as a percentage of total provincial revenues (see Table 4.16). For the 19th century onwards, the percentage grew from 8.45% to a high of 46.8% in 1888. These figures suggest to us the significant amount of monies the province of Ontario received from the timber industry. Translating these percentages into dollars, Table 4.17 provides a time series of these revenues in dollars. In the case of Quebec, the dues and ground rents were comparable for the same period. Table 4.18 reveals the time series of the total amount of forest revenues received by the government of Quebec from 1867-1885.

Even though the amounts collected for dues in Quebec and Ontario were comparable, the due rates for each province differed. The Canada Lumberman (1886) reported different rates for dues collected in the two provinces for different types of wood: for oak and walnut, it was 4¢ per cubic foot in Quebec whereas it was 3¢ in Ontario; red and white pine was 2¢ in Quebec while in Ontario the charge was 1 1/4¢; and finally, pine logs of 13 1/2 feet long were charged 11¢ in Quebec while it cost 15¢ in Ontario.

Such a large amount of funds collected from the dues and limits auctioned meant that vast amounts of forest lands

Table 4.16

Percentage of Timber Revenue to Total Provincial Revenue:
Ontario (1867 - 1900)

Year	Percent
1867	8.4
1868	19.4
1869	15.2
1870	24.5
1871	21.5
1872	29.0
1873	12.3
1874	12.0
1875	14.0
1876	16.4
1877	12.8
1878	15.0
1879	16.0
1880	19.3
1881	19.0
1882	19.7
1883	14.9
1884	21.9
1885	23.6
1886	28.9
1887	46.8
1888	29.4
1889	25.7
1890	20.2
1891	46.2
1892	46.4
1893	25.8
1894	30.6
1895	33.1
1896	21.7
1897	25.5
1898	24.5
1899	36.8
1900	36.8

(Source: Pross, 1967:36)

Table 4.17

Timber Revenues: Ontario 1867 -1900

Year	\$ Revenue
1867	104,894
1868	190,237
1869	508,561
1870	379,965
1871	570,882
1872	659,155
1873	858,637
1874	425,504
1875	377,503
1876	362,398
1877	409,340
1878	293,309
1879	342,894
1880	413,415
1881	537,939
1882	547,103
1883	480,490
1884	421,485
1885	657,297
1886	742,029
1887	1,019,517
1888	1,688,015
1889	1,039,763
1890	878,772
1891	837,438
1892	2,155,792
1893	1,897,871
1894	980,497
1895	1,096,934
1896	1,156,425
1897	896,798
1898	929,571
1899	1,005,449
1900	1,543,062

(Source: Pross, 1967:36)

Table 4.18

**Dues and Ground Rents Collected in the Province of Quebec
1866 - 1885**

Year	\$ Amount
1866-67	95,115
1867-68	331,751
1868-69	362,868
1869-70	406,480
1870-71	444,752
1871-72	518,682
1872-73	527,976
1873-74	532,734
1874-75	386,774
1875-76	391,618
1876-77	351,323
1877-78	314,880
1878-79	342,881
1879-80	543,518
1880-81	668,596
1881-82	684,743
1882-83	660,751
1883-84	530,115
1884-85	528,574

(Source: Canada Lumberman, June 1887)

in Central Canada were awarded as timber limits to the timber and lumber companies. The Canada Lumberman (1895) reports that towards the end of the 19th century (1893), the amounts of timber lands under license in the two provinces were 21,500 square miles and 48,000 square miles respectively for the provinces of Ontario and Quebec.

During the procurement phase, in direct support of the production process, the State also performs an "allocative function", to borrow a phrase from Claus Offe (1975

(a)), whereby it maintains the condition of accumulation by providing resources for the necessary transport infrastructure of ferrying logs to the lumber mills. The history of this support involved the provision of funds for the building of timber booms, slides and canals which facilitated the movement of logs to the mills owned by the timber and lumber companies. The extent of such involvement is reflected in a report by the Canada Lumberman on January 1st, 1884.

"The Federal Government owns extensive and costly works on the rivers of Quebec and Ontario to facilitate the descent of timber and logs. The works are to be found in the Saguenay district, St. Maurice, Ottawa, Gatineau, Madawaska, Coulonge, Petawawa, Dumoine and Trent. They embrace 5071 feet of canals, 22063 feet of slides, 112579 feet of booms, 2440 feet of bridges, 21402 feet of dams, 346 bulkheads, 274 piers, most of which require an outlay for repairs."

Cost-wise, the transport infrastructure was extensive. In 1841 in Upper Canada, the State expended £28,000 for the construction of slides and booms. By 1853, this cost had escalated to £50,000 (Gillis, 1978:281). Spending to build the slides and booms continued and it was reported by the Canada Lumberman (February, 1884) to be \$105,750 in 1882.

Such provision of financial resources places the State's actions in this procurement phase as an important moment in the circuit of capital accumulation of the timber and lumber companies. The procurement phase is not the only place whereby the State performs such necessary functions.

We will witness the occurrence of State activities as we review the various phases of the capital circuit of the timber and lumber companies.

4.3 THE PRODUCTIVE CONSUMPTION PHASE

4.3.1 The Production Process

With the timber limits secured from auction or through grants, the production phase begins with a survey of the limits acquired. Usually, experienced surveyors (timber cruisers) were sent to examine the land and to seek out valuable groves of timber. The territory was explored and the value of the available timber estimated and reported back to the timber and lumber companies. Besides surveying the quantity and quality of timber available, an assessment of the conditions and capabilities of the surrounding streams for floating logs was also made (Lumber Trade of the Ottawa Valley, 1870).

Before the lumbermen could be sent to harvest the trees, a series of lumber camps would be set up to house the men. One of these camps or shanties³⁸ would be built comprising of thirty to one hundred and twenty men each (Hughson, 1964:83). These self-contained communities included

³⁸ According to Hughson (1964), the word shanty means a group of buildings sheltering men and animals engaged in logging. Supposedly, it was derived from the French word *chantier*.

buildings for offices, stores and quarters for the lumbermen. In addition to the lumbermen, the camp would also have a cook and a shanty-clerk.

The actual process of cutting timber usually began in late August after the supplies for the lumber camps were transported to the shanties. If the area was accessible only via rivers, large birch freighting canoes were used to carry the supplies. These supplies were transported to the camps by teams called 'train-gangs' and it required a period of time for them to be transported (Lower, 1928:405). For example, to transport supplies from Pembroke to Lake Timiskaming took one month (Lower, 1928:406).

In late September of each year the lumbermen would set off for the shanties. The teamsters, usually farmers hired for the winter with their horses or oxen, left for the lumber camps a month earlier due to their slower progress to the shanties. The lumbermen were usually Irish and Scottish immigrants and local French Canadians. This is confirmed by reviews of the workers' pay account books of one of the branches of Pollok, Gilmour and Company, indicating names of Irish, Scottish and French Canadian descent (PAC, Gilmour and Hughson, MG28 III, 6, vol. 409). The trek of these men was towards the companies' established depots that were distribution centres for men and supplies. In the case of the firm, Pollok, Gilmour and Company, one of its branches

in Central Canada, Gilmour and Company, had set up 8 depots for their operations, with names such as River Desert, Castor, Bridge, Island, Baskatochin, Bois-franc, Tomasine and Rapid Lake (PAC, Gilmour and Hughson, MG28 III 6, vol. 400: Hughson, 1964:82). From these depots, the lumbermen would fan out to their respective shanties in the woods.

The work week for the lumbermen was from Monday to Saturday and it usually started from 5:00 in the morning and lasted until 3:30 in the afternoon (Hughson, 1964:84; Curtis, 1981:44). Before 1870, a team of three axemen with a teamster was the size of each lumbering party. However, with the introduction of the cross-cut saw, the number of axemen dropped to two.

Following the choice of trees to be cut (usually the largest and the best trees were chosen for masts and spars) the sawyers would go to work.³⁹ Two teams of sawyers would operate close to each other to ensure that the skidder - the individual who hauled cut logs to a chosen assembly point in the woods - would be within their calling distance to drag the logs. Following the drop-off of the logs, the teamster would drag the logs by sled to the rivers where they were piled on top of the ice. Here, the logs would be stored

³⁹ For a detailed discussion of wood operations in terms of shanty life, timber cutting, etc., see Curtis (1981); Hughson, (1964); Lower, (1973).

until spring. For these wood operations, an average gang of four men could cut about 400 cubic feet per day (Lower, 1973:201). In order for us to comprehend the size of the cut, Table 4.19 provides the total amount of logs produced by a branch of Pollok, Gilmour and Company, and the Bronson Company for years 1885-1889.

Table 4.19
Amount of Sawlogs Cut during 1885-1889
(Pieces)*

	<u>1885-1886</u>	<u>1887-1888</u>	<u>1888-1889</u>
Gilmour and Company	394,000	360,000	175,000
Bronson and Weston	265,000	358,000	545,000

*The amount of logs cut includes some logs left over from the previous cutting season.

(Source: PAC, Gilmour and Hughson, MG 28 III 6, Vol. 412)

The log drive to the mills downstream that were owned by the timber and lumber companies generally started in April and ended in July. When square timber was exported, these logs would be floated downstream to the ports in the form of square timber rafts. If the streams were too small for cribs (small rafts containing logs fastened together), then the logs would be floated separately downstream (Lumber Trade of the Ottawa Valley, 1870). For the log drive, the lumbermen would follow these individual sticks from the shore or by canoes to prevent any log-jams.

Facilitating the movement of these logs through the falls were timber slides. These slides were simply chutes allowing the logs and cribs to pitch down the falls at an incline instead of "headalong over".

In the early parts of the 19th century when square timber was exported in huge amounts, the timber would be floated to the timber coves owned by the timber and lumber companies near the ports of export. There, the square timber was prepared for shipment to Great Britain. Cullers, butchers and hewers were hired by the companies to measure, grade and prepare the timber for export. Later on in the 19th century, when the U.S. markets replaced the British markets as importers of wood produced in Canada, the logs were floated to the sawmills downstream where they were cut into lumber. We have indicated in the previous pages that the timber and lumber companies invested in lumber mills to produce the sawn lumber for export. In Central Canada, the main activity area for the sawmills' operations was around the Ottawa valley at the Chaudière.

Following the arrival of the logs near the sawmills, they were caught by booms that were spread across the river and diverted through different slides to the respective sawmills owned by different timber and lumber companies. At the mills, the logs were raised out of the water by a powerful wheel which placed these logs onto a cradle that guided

them through the saws. The logs were sawn to various sizes by different types of saws. The slabbergate, which had 18 to 20 saws, would cut the outside of the logs into 1 inch-thick boards, leaving the bulk in slabs of 14 inches thick. The slabs were then turned over on the flat side and placed through the stock gang which consisted of 30 to 40 saws. The stock gang then sawed the slab into 1 inch boards. Some mills, such as those owned by Bronson and Company, possessed a type of saw called the Yankee gate. In this case, the saw is a combination of the slabber and the stock gate. This gang sawed in a simultaneous motion where the log was sawn by the slabber as described above and the slab was turned over and sent through the stock gate.

After the logs were cut into boards, the rough sides and ends were then cut and trimmed to the required width and length by counter saws and the circular-saw. The planks were then graded by the mill foreman and taken away to the piling grounds (Lumber Trade of Ottawa Valley, 1870). The volume of lumber cut in these mills was by no means small. Table 4.20 reveals the extensive amount of lumber cut by one mill of Gilmour and Company, a branch of Pollok, Gilmour and Company.

For energy, the mills were powered by the immense water power available in Canada. Later on in the century, electricity was used to light the mills thus enabling the

Table 4.20

Volume of Lumber Cut by Gilmour and Company (1879-1896)

<u>Year</u>	<u>Amount</u> (Million feet)
1879	30
1881	70
1889	40
1890	35
1891	30
1893	15
1894	40
1896	20

(Source: Canada Lumberman, 1880-1896; PAC, Gilmour and Hughson, MG 28 III 6, Vols. 400, 412)

mill operations to continue into the night (Canada Lumberman, 1886). The work hours for these mills were long and the conditions were by no means optimal. An average work-day was 11 1/4 hours long for the mill of Gilmour and Company in 1888 (Annual Report of the Bureau of Industries, 1888:20). Table 4.21 provides a time series of the average work hours per week for mill workers in Ontario by the type of job classification. Besides adults, child labour was also employed in the mills. Their work hours have been vividly described to us by a child employee of one of the timber and lumber companies in a testimony to the Bureau of Industries (1888:120):

"_____, Ottawa, testified that he was fourteen years of age and was working in Booth's lumber mill in that city. His working hours were from six o'clock in the morning till twelve noon; he got fifty or fifty-five minutes for dinner, and after dinner, they worked until half-past six o'clock at night, except on Saturday when the hands quit at six o'clock in the evening. He said also that the little fellows who worked in the mill at night began at seven o'clock in the evening and work until five o'clock the next morning."

Table 4.21

Work Hours Per Week for Mill Workers in Ontario: 1884-1888

Type of Mill Work

Year	Culler	Sawyer	Average Mill Worker
1884	72.0	65.0	62.8
1885	67.7	59.8	64.5
1886	63.0	56.3	60.7
1887	67.2	63.2	67.3
1888	61.7	56.3	58.0

(Source: Annual Report of the Bureau of Industries, 1884-1888)

Such intensity of working hours continued throughout the course of the 19th century.

Following the production of planks, sidings, pickets, etc., these products were shipped to buyers and other timber merchant dealers in Great Britain and the United States. In the first half of the century, when the trade in square timber was strong, the logs were loaded by Irish immigrants onto waiting timber ships from the rafting ground of the timber coves owned by the timber and lumber companies. The other wood products such as deals, ends, boards, staves, and other small short pieces would later be stacked on top of the square timbers. On an average, it took almost three weeks to load a timber ship for a voyage to the ports of Great Britain that usually took more than one month (Lower, 1973:228). Thus, it was only possible for these timber ships to make two voyages over a season before

the winter freeze. A large number of vessels were used by the timber and lumber companies to ship the square timber, deals, etc. to the British markets. For one of the branches of the Pollok, Gilmour and Company in New Brunswick, Gilmour and Rankin, the number of vessels utilized on an average between 1830 - 1850 was 73 vessels per season (see Table 4.22).

Later on in the century when the markets for wood manufactured in Canada were in the United States and the types of wood exported were mainly deals, sidings, pickets, etc., barges and railways were used to transport these products south (Canada Lumberman, November, 1886). In the Ottawa valley, the sawn lumber was towed down the Ottawa and the St. Lawrence rivers to Sorel, and down the Hudson river to Albany and New York. Barges of different sizes were used to carry the loads. The large size barge carried loads of 300,000 board feet of sawn lumber while the smaller ones carried 175,000 board feet.

With the advent of railways, the transportation of sawn lumber to the south was made even easier and shipping could occur all year. Read this comment written in the Canada Lumberman on May 1, 1889:

"at any rate that a new era in the lumber trade of the Ottawa Valley had dawned, and that with the facilities now offered for its rapid shipment the year round - instead of lumber firms, as formerly, having to avail themselves of limited period of navigation in order to

Table 4.22

**Number of Vessels Used by Gilmour, Rankin and Company
for Wood Shipments to Great Britain
1830 - 1869**

Year	Number of Vessels	Total Cost of Cargo		
		£.	s.	d.
1830	80	54959	15	7
1831	53	37748	5	8
1832	56	31968	13	5
1833	68	41298	5	9
1834	70	44794	0	11
1835	91	58098	4	3
1836	66	40238	12	0
1837	54	36874	4	2
1838	78	57319	17	7
1839	91	54230	3	2
1840	94	56767	0	10
1841	100	61985	19	0
1842	46	34635	2	0
1843	65	42477	8	11
1844	74	45343	19	9
1845	97	55607	1	4
1846	88	45834	6	1
1847	36	20708	3	3
1848	48	26190	17	9
1849	55	29171	6	10
1850	56	28950	15	5
1851	71	39074	6	9
1852	45	25347	9	0
1853	47	30306	5	6
1854	52	41448	10	3
1855	22	17191	0	3
1856	37	25690	5	2
1857	55	39383	3	1
1858	35	27140	18	5
1859	24	17128	13	10
1860	20	16511	4	7
1861	21	18074	1	0
1862	14	11951	2	3
1863	24	12933	2	1
1864	28	19132	8	7
1865	18	12598	14	1
1866	23	19916	13	4
1867	16	16416	3	4
1868	24	21745	19	7
1869	28	14553	11	6

(Source: New Brunswick Museum, Gilmour and Rankin)

ship their products, and the lumber being thus taken in advance to the market, as it were to be stored at the points of distribution, and which had serious effect on the price obtained for it, - the fluctuations and depression in the great lumber trade which was felt a few years ago is not likely to occur again, in so great a degree at any rate

With the completion of the Canadian Pacific and the Canada Atlantic Railways transportation of the deals and wood products was greatly enhanced. In addition, feeder lines were constructed to facilitate access to the sawmills and cities in which the wood products were to be delivered.

4.3.2 State Activities

For this productive-consumption phase, the State's involvement was focussed on the provision of support services to enhance this phase of the capital circuit of the transnational timber and lumber companies. In the early period of the export of wood products from Canada, because of the competitive rivalry in sales among the timber and lumber companies, the quality and type of wood products shipped to the markets of Great Britain varied. This generated severe repercussions on the sales of these wood products in the markets of Great Britain. Especially when square timber was exported in large quantities, the complaints of British buyers concerned the uneven and poor quality of the wood exported from Canada. To overcome this condition (destructive competition) and to provide uniformity to the wood products manufactured, the State established

the Office of the Supervisor of Cullers which awarded legal certification of the wood culled for export. Acts were passed to ensure that the quality of wood exported from Canada was classified appropriately. The grades classified were divided into grades of good and superior or inferior and ordinary (Lower, 1973:221). To improve the ability and skills of the cullers, courses were also provided to upgrade their skills.

Notwithstanding this support service, the State was also active in ensuring that the production process remained uninterrupted. Throughout the 19th century, the forests of Canada were constantly plagued with forest fires. In Ontario, through extensive lobbying by the timber and lumber companies, the State enforced fire regulations to prevent forest fires. These regulations "entailed the government requesting timber and lumber firms to nominate fire rangers for the limits they wanted protected" (Chew, 1983:302). In addition, the State enforced and mediated the rights of ownership over the cases concerning illegal cutting of trees from limits owned by the timber and lumber companies. Incidences of this nature were quite prevalent whereby settlers would cut trees from areas designated as timber limits. Review of the records of one of the branches of Pollok, Gilmour and Company indicates letters to the Commissioner of Crown Lands complaining of illegal cutting by settlers (PAC, Gilmour and Hughson, MG 28 III 6, Vols. 421,157).

At times, to maintain that the production process remained uninterrupted, the coercive apparatus of the State such as the police and the military were provided to maintain 'civil obedience'. Occasions of this nature occurred during the late 19th century when the economic crisis forced firms to reduce the wages of workers without decreasing the intensity of work. Such acts precipitated strike action by lumber mill workers. In response to the millowners' request, troops were provided by the State to maintain civil obedience and protect 'scab labour' employed by the timber and lumber companies during the strike. (These activities will be explored in greater detail in the next chapter.)

From this, one can note therefore that the activities of the State in this phase of the circuit of the business activities of the timber and lumber companies were far-ranging and supportive and, as well, necessary for the continuous operation and accumulation of the transnational timber and lumber companies.

4.4 THE REALIZATION PHASE

4.4.1 The Completion of Sales in the Other Parts of the World-Economy

The circuit of capital of these transnational timber and lumber companies was completed, on the whole, in the other parts of the world-economy. In the early period (1830's), Great Britain was the country where most of the

timber and lumber products were sold. By the mid-century, the American markets began to absorb substantial amounts of wood produced in Canada (Ouellet, 1980(a)). Later on in the 19th century, the Canada Lumberman (February, 1889) reported a substantial amount of wood products manufactured in Canada being sold in Latin America, the West Indies and Australia. In particular, the firm of Bronson and Weston was mentioned.

This phase of the business activity focussed on the sale of the wood products where the exchange was facilitated in the early 19th century by timber auction houses. The shipment of wood arriving at the British ports would be auctioned off by auctioneers. The large auction houses which operated in this period were Churchill and Sim, Simson and Mason and Henry Freeman and Company. (Lower, 1973:141). Besides having the timber and wood products auctioned off, the timber and lumber companies would sell their products to timber merchant houses located in the other parts of the world-economy or to their own branches which would handle the sales.

The firm of Pollok, Gilmour and Company relied on its branch in Liverpool to handle its sales in England and in the later parts of the 19th century, it relied on some of its affiliates such as Hughson and Company (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 125). A letter from the records of one of the branches of the firm outlines such arrange-

ments of sale:

Albany N.Y.
Aug. 1, 1893

Gentlemen: -

We received a settlement today from the Standard Agency Co., for the lumber shipped by you to them June 23rd, and they make a deduction of \$10.50 per M ft. on 3495 ft 5/4 2 mark siding, which amount they, is mill culls. Do you know anything about this? They also charge us with \$2.00 for rental which they had to pay on cars #17872 and 13277, shipped by you June 28th, which charge they say was made, owing to the length of time occupied by you in loading the cars.

Will you please let us hear from you and oblige.

Yours truly,

Hughson & Co.

Likewise, the Bronson and Weston Company would send the wood products manufactured in Canada to their branches such as Bronson, Weston, Greene and Company in Burlington and Boston, and also to J.W. Dunham of Boston in which the Bronson and Weston Company had substantial interests.

The records of the Pollok, Gilmour and Company, and the Bronson and Weston Company are replete with letters of the completion of sales in Great Britain and the United States of the timber and lumber products manufactured in Canada. Credit was provided by these companies to the timber merchant houses. A thirty-day credit or, in cases, a two-week credit was the normal financial facility extended by the timber and lumber companies (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 154). Because the timber and lumber trade has a long credit system and an extended period

of the production phase which lasts for 11-12 months, the realization of their money-capital investments (the timber and lumber products as commodities are exchanged (sold)) does not occur until a year following the initial investment. At times, this realization period extended for two years (Rankin, 1921:232).

This extended period of realization of the monetary investments made in the procurement phase warranted a constant monitoring of the demand for timber and lumber products in the other parts of the world-economy through wood circulars published in London and Liverpool (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 21). It was also supplemented by letters from timber merchants providing these timber and lumber companies with news on the conditions of the market for timber and lumber products. Sales of this commodity (timber and lumber products), being a product for the procurement phase of other production processes, was linked closely to the economic conditions in other parts of the world-economy. In addition, the realization phase was also conditioned by tariffs which affected the prices of the timber and lumber products. Thus, the operations of the transnational timber and lumber companies and, in this case, the realization of its money-capital investments, was molded and conditioned by the socio-economic and political forces occurring in the capitalist world-economy.

4.4.2 State Activities

The prices of the timber and lumber products were affected by a series of conditions: freight rates, the level of supply available and the costs of production (Lower, 1973:156). The actions taken by the State in the raising and lowering of tariffs also played a part in the final prices of these products. In the case of wood products manufactured in Canada, the prices of these products and their ability to compete with other products manufactured in other parts of the world-economy were quite dependent on the tariffs imposed by the State to which these products are shipped. A raising of the tariff on these wood products by certain States would hinder their competitive nature and final sales. Likewise, an imposition of tariffs on wood products manufactured in other countries, such as Baltic wood entering British markets, would provide a strong opportunity for wood products manufactured in Canada to compete in the British markets. We shall return to these situations in the later section of this chapter and in the subsequent chapters.

Such acts by the State thus could facilitate or hinder the final sale of the wood products of the transnational timber and lumber companies. These acts of the State, however, are contingent on the strength of the timber and lumber interests and the success of its competitive

struggles against other fractions of capital. Furthermore, the limits of a nation-state's ability to act is also conditional on other states in the interstate system.

4.5 THE ACCUMULATION PHASE

4.5.1 Profits and Reinvestment

With the realization phase, the timber and ~~lumber~~ products as commodities are sold through exchange. Money-capital is thereby realized and the accumulation phase follows whereby profits are derived and extracted as personal income for the owners of the timber and lumber companies. However, in order for those companies to continue to reproduce themselves, a portion of the accumulated profits re-enter as reinvestments in the procurement phase of the business circuits of these firms.

The records of the transnational timber and lumber companies examined indicate such activities. The companies' records, albeit sketchy, show profits for the branches operating in Canada. For example, the branches of the Pollok, Gilmour and Company in New Brunswick and Lower Canada reported profits of £54,000 for the year 1837 (UNB Archives, Gilmour and Rankin Papers, MG 4 rep. 4). This is also confirmed by the ledgers of R.G. Dunn and Company which reported on September 24, 1857 that one of the branches,

Gilmour and Company of Montreal, Quebec was "doing large business and making money" (Canada, Vol. 13, Pg. 206, R.G. Dunn and Company Collection). Later on in the century, this branch continued to report yearly profits for the years 1878-1882 as follows: \$96,241.78; \$138,884.65; \$242,797.88; \$181,715.48; \$131,296.03 (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 154).

The continued operations of these branches in Canada indicate that the money-capital realized from the sale of the timber and lumber products was reinvested back into the procurement phase of each season's timber and lumber operations. At the same time, the profits realized from the sale were also extracted by the owners of the Pollok, Gilmour and Company for their own personal income and use. These profits were transferred to the owners of the Pollok, Gilmour and Company who were British subjects domiciling in Great Britain.⁴⁰ The records indicate that vast amounts of these profits were being transferred to Great Britain. Transfers were on a yearly basis to the partners residing in Great Britain (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 156). In the records examined, there were no specific annual indications of amounts transferred; however there are occasions

⁴⁰ In a survey of millionaires in Great Britain in the late 18th and early 19th centuries, W.D. Rubenstein (1981:98) identified one of the owners of Pollok, Gilmour and Company as part of the extremely rich Scotsmen group.

whereby one can obtain an indication of the cumulative amounts transferred and the profitability of the operations of the timber and lumber companies' operations in Canada. For example, the owners of Pollok, Gilmour and Company, John and Arthur Pollok, had amassed enough to buy the Irish estates of Lismany, Glinsk and Creggs in Galway in the early 19th century. These estates were estimated to be worth over £1,000,000 (Rankin, 1921:29). The cost of these estates would locate the owners of Pollok, Gilmour and Company among the very rich in England, for according to Rubenstein (1981:61) having a fortune of between £500,000 - £1,000,000 would place an individual in this category in early 19th century Great Britain. The transfers continued for we find that between 1886 - 1889, a total of £100,000 was transferred to the trust fund of one of the partners, Allan Gilmour in England (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 21).

These practices were also repeated in the operations of the Bronson and Weston Company. We find evidence of them in the Company's records outlining its liabilities to the owners of the Company. For example, between the years 1870 - 73, the Company paid a total of \$1,846,497.30 to the four owners of the Company. This amounted to an average of \$461,624.32 per year (PAC, Bronson Company, MG 28 III 26, Vols. 94,95). Transfers of profits were also made to one of

the owners of the company who was living in the United States. A letter dated 21st December 1872 indicates such transfers:

W.C. Brown Esq.
Painted Post, New York.

Dear Uncle: Enclosed find drafts on New York from Bank of British North America for \$5,766.94 and another from Quebec Bank for \$6,550.18 amounting together to the face of the two notes we sent you viz \$12,317.12. The drafts are drawn to the order of Bronson and Weston and are enclosed payable to your own. The watch I took from you while at the Post

Very truly yours,
E.H. Bronson

At this level of the business enterprise, the transfer of profits from Canada to Great Britain and the United States reveals the nature of the business operations and practices of transnational timber and lumber companies. If we translate this practice to the level of the world-economy, it represents and reveals the historical tendencies and the nature of capital accumulation in the world-economy where capital is transferred from the periphery and semi-periphery to the core areas.

4.6 CAPITALIST PRACTICE: THE CASE OF THE TRANSNATIONAL TIMBER AND LUMBER COMPANIES

The preceding discussion elaborated on the themes of the dynamics of capital accumulation in the world-system via an examination of the conditions and forces that define and structure the dynamics of the accumulation processes of the

transnational timber and lumber companies operating in the 19th century world-economy. The examination focussed on the dynamics of the world-economy and the structural conditions and processes that sustained or inhibited the accumulation of capital of the timber and lumber firms. This argument was based on the 'logic' of capital accumulation and the nature and characteristics of the capitalist world-system. On occasions, certain social-political relations and practices were briefly discussed in relation to the promotion of the continued reproduction of these capitalistic practices. However, such a historico-structural-systemic analysis did not afford an opportunity to explore fully certain aspects of the social-political practices of the transnational timber and lumber companies in the maintenance and support of the continued accumulation of capital. For this section, I will attempt, to explore within the confines of the availability of historical information, instances and aspects of these social-political practices depictive of the actions of these companies and their proprietors in the 19th century world-economy, which facilitated the condition of the accumulation of capital.

Operating in British North America in a period when the economy was based mainly on natural resource extraction, these transnational timber and lumber firms were a major economic force and employer. The proprietors of

these firms were often referred by economic historians as 'lumber barons' to depict their economic-political influence in British North America. There have been, however, few attempts to examine the social-political activities of these companies and their proprietors in the political economy of early Canada.⁴¹ However, it is clear that whatever has been written about these companies and their proprietors, they have wielded considerable economic and political power. In fact, the noun 'baron' and the social-political power associated with it, as applied to the proprietors of these companies, aptly describes the political and economic dominance these owners of the timber and lumber firms had in the geographical areas where their firms operated and the part they played in the political process.⁴²

The timber and lumber firms as a 'fraction' of 'capital' operating in Canada became more cohesive and cooperative in terms of achieving their common business

⁴¹ Other than the M.A. theses of Peter Gillis (1975) and Burton Glendonings (1978) which examined the business practices of lumbermen E.H. Bronson and George Burchill, there have been few works focussing primarily on the proprietors of the timber and lumber firms. To a limited extent, the work of H.V. Nelles (1974) provides a fascinating study of the dynamics between the lumber barons and the politicians.

⁴² Reviewing aspects of social-political activities of the owners of the timber and lumber firms, one is reminded of parallels to the social, political and economic power of the feudal barons of the feudal era.

interests towards the end of the 19th century. This is reflected by more visible signs of cooperative business relationships among these firms. It does not mean, however, that a cooperative harmony was attained, as signs of divergent interests continued between groups of firms undertaking operations in different parts of Central Canada (Gillis, 1974). Nevertheless, the state reached by the firms at the end of the 19th century in terms of cooperation in business activities is very much different from the times of competitive rivalry which pervaded the timber and lumber operations in the early parts of the 19th century. In these early stages of the start-up of the timber and lumber industry in British North America during the 1830's and 1840's, competition to secure the timber limits for timber operations was quite pronounced. These firms inevitably competed against each other to obtain the best possible advantage for their own business interests. In the case of New Brunswick, there was severe competition whereby smaller companies were being taken over by the bigger ones. A variety of means were also used to squeeze out competition, as Wynn (1981:133) has indicated. These included obtaining timber cheaply through the use of jobbers, manipulating the prices of goods supplied to jobbers to undertake lumbering operations, monopolizing the best timber, berths and utilizing new technology to maximize and improve the efficiency of production. Such

activities did not occur in an atmosphere of silent acquiescence on the part of the State. The State facilitated this movement towards concentration in the industry with the passage of regulations which awarded five-year timber leases to timber firms without the condition of having to remove timber from these limits within the five-year period. Such acts doomed those companies which did not have sufficient financial resources to invest in these limits with five-year leases.

Not only was there competition between the large and small firms, there were also instances where the competition occurred between the larger firms. Wynn (1981:134-136), in his examination of the timber and lumber industry of New Brunswick, documented the bitter business struggle between two large timber and lumber firms operating in early New Brunswick: Gilmour, Rankin and Company and Joseph Cunard and Company. According to Wynn, between the 1830's and 1840's the two firms battled each other for pre-eminence in the timber trade of New Brunswick. Such struggles drew in "political, social and economic fronts" whereby "a Crown Lands Office deputy was implicated in the conflict and accused of partiality to Gilmour, Rankin and Company" (Wynn, 1981:134). The end result was the dominance of the firm of Gilmour, Rankin and Company in the timber industry of New Brunswick.

The turbulent and competitive business atmosphere of the 1830's and 1840's resolved to an era of coordination and cooperation among the timber and lumber firms in the later period of the 19th century. The reasons for such a maturing to cooperative activities can only be speculated upon since there is very little historical information available to guide us. Can it be that the early periods of competitive business practices in the 1830's and 1840's were the result of the 'birth pangs' of an industry wherein there were no dominant companies in this sector and thus firms were fighting for control and a niche in this economic resource sector? And the later periods of the 19th century of coordination and cooperation were, as one can argue, times whereby competition had receded and the larger firms had captured and monopolized the sector. If we couple this thesis with the discourse on long cycles of the world-economy which reveals a B-phase lasting from 1815-1850 in the world-economy, whereby in a B-phase intense competition prevails leading to a consolidation and concentration of firms for the expansionary upswing which ensues, the above explanation given could be plausible. There are ample records of a downturn in business activities in the timber and lumber sector (see Ouellett (1980(a), Wynn (1981)). Therefore, with the world-economy in a phase of a downturn during the 1830's and 1840's and with the emergence of a new

industry whereby competition is rife to capture a niche, such factors could explain the business 'behaviour' of the proprietors of the timber and lumber firms. The cooperative period which followed can be accounted for by the maturing of the industry and the consolidation and concentration of firms following a downturn.

The cooperation among these firms in facilitating the continued reproduction of their business operations ranged from joint participation in the formation of companies which regulated sawlogs and the construction of infrastructure such as booms, slides and piers necessary for the production process, to the organization of association among lumbermen to present the interests of the timber and lumber companies in the political lobbying process.

Evidence of the former cooperative activity is reported by the Canada Lumberman (November 15, 1888:8) which listed the formation of two companies by lumbermen in Ontario specifically for the purpose of regulating sawlogs and constructing slides, booms and piers. The Ottawa Improvement Company was one of these companies, having a start-up capital of \$150,000. and a Board of Directors comprising of Messers Bronson, Perley, Eddy, Gordon, Robinson and Booth who were proprietors of timber and lumber firms. In addition to this cooperation in the production process, we also find evidence of other forms of cooperative

activity among the timber and lumber firms. The records of the Bronson Company reveal agreements to exchange timber limits among the timber and lumber firms. Also, a letter from the files of Pollok, Gilmour and Company (PAC, Gilmour and Hughson, MG 28 III 26, Vol. 157) provides an indication of such a degree of cooperation:

28th Oct 1886

Messrs Bronson and Weston + Grier and Co. agree to exchange all their limits on the Gatineau containing about nine hundred square mi more or less with Messrs Gilmour and Co. for all their limits on the Kippewa known as the Book + Waddell Limits, containing about one hundred and sixty eight miles more or less together with the farms and buildings in connection with said limits.

G.A. Grier

Besides these cooperative activities in the production process, the timber and lumber concerns were collectively aware of their business interests and mobilized themselves accordingly to meet the challenges that faced them. Whether it was increases in dues or tariffs, these firms often banded together for action on the social-political front. A letter from the files of Gilmour and Company (PAC, Gilmour and Hughson, MG 28 III 26, Vol. 151) notes for us such awareness of collective interests:

30 Nov 1880

Gilmour and Co.
Quebec.

Dear Sirs:

Your favours of 26th and 27th with enclosure are duly to hand also copy of the official Gazette showing the increased dues put on logs in the Province of Quebec, which cannot be allowed to pass, without some attempt on the part of all interested to have some reduction made, we will try and arrange to have a meeting of the lumbermen here to decide on what is best to be done.....

Gilmour and Co.
(Trenton)

With the formation of associations such as the Lumbermen's Association of Ontario, the business interests of the timber and lumber firms could be articulated collectively and more formally. The associations provided forums to consider the members' concerns and organizational mechanisms to promote the interests of the timber and lumber companies. The objects of the Lumbermen's Association of Ontario as stated in its first clause clearly reflected this:

"To promote the interests and conserve the rights of those engaged in lumbering operation, or in the manufacture of lumber; to hold meetings of the members for consideration and discussion of questions affecting those interests, and by unison and cooperation to build up and foster the lumber business."

(PAC, Gilmour and Hughson, MG 28 III 6, Vol. 54)

The need to collectively mobilize and express their business interests does not necessarily mean that the interests of these firms were not coincident with those of the State. On the contrary, the historical records show

that the policies of the State and the action of members of the State's institutions, on most occasions, were consonant with the business interests of the timber and lumber firms. Not only were the State's policies and the actions of its agents, at times, functionally consonant (if we agree that the State seeks to guarantee the continued accumulation of capital) with the business interests of the firms; at the instrumental level, we find instances of linkages and supportive acts between the members of the State's institutions and the timber and lumber companies.

In the previous section, we have traced some policies of the State and its structural functions in the continued reproduction of the accumulation processes of the timber and lumber firms. For this section, we would like to examine some instrumental aspects of these relations (linkages) between the firm and the State.⁴³

The concrete relations between the timber and lumber firms and the State is highlighted by the fact that on

⁴³ For this section, the objective is to go further than this. With available historical information obtained from the confidential letters of the owners of the timber and lumber companies, I will attempt to outline some aspects of this instrumental linkage between the state and the timber and lumber companies. Commentaries such as those of Wallace Clement (1975:345-346;1983) on the relations between the economic elites and the state in Canada have attributed linkages via a commonality of ties through kinship, or previous positions of the economic elites in state institutions.

occasions, in the later half of the 19th century, some of the owners of the timber and lumber companies were also members of provincial legislative assemblies and the Parliament of Canada. We note that E.H. Bronson, President of the Bronson and Weston Company was a provincial member of the Ontario Legislative Assembly between 1886-1898 and as well a member of the Provincial Cabinet (1890-1898) of Premiers Oliver Mowat and A.S. Hardy. Another person of stature in the lumber industry, W.C. Edwards, owner of W.C. Edwards and Co., was also a Liberal Member of Parliament between 1888-1903 and a member of the Canadian Senate from 1903-1921. What this means is that linkages between the State and the timber and lumber companies were not only close, they were often the same people.⁴⁴ Such proximity of interests can be traced further by the existence of a "lumbermen lobby" in the Ontario Legislature of the late 19th century where we find the Canada Lumberman (March 1888) listing the names of 9 members (Thomas Murray, Robert Lyn, James Clancy, James Rayside, Alpheus Wood, Orson Phelps, James Camel, William Lees and John Fell) of the Assembly who had financial interests in the timber industry and who were according to the paper 'friends of the timber and lumber industry'.

⁴⁴ Leo Panitch (1977:11), in his review of the linkages between the Canadian State and the bourgeoisie, has also commented on this feature of state and 'capital' relations.

The evidence of these close linkages between the timber and lumber companies and the State does not instrumentally indicate (or prove) that there were actions undertaken by either the owners of the timber firms or members of the State institutions which were conducive to the interests and accumulation processes of the firms. At best, with the information presented above, we can assert that with this coincidence of interests as reflected by the structural linkages, there could be such actions. However, our assertion becomes more concretized and validated by some of the historical evidence that we have discovered in our examination of the operations of the timber and lumber companies. For example, we find the timber and lumber companies had the assistance of R.W. Scott M.L.A. in securing better tenure for their timber licenses. The services provided were rewarded with monetary payments.

Ottawa, May 1st 1869

Messrs Dodge and Co.
Byers Inlet, Ont.

Gentln - Enclosed please find a copy of the Crown Lands Regulations. You are doubtless aware they are in some essential respects much more favourable to the holders of licenses, than any previously issued.

You are also probably aware that it was mainly through the exertions of our City member Mfr R.W. Scott that such advantageous terms were secured from the local Legislature.

As a means of testifying a proper appreciation of Mr. Scott's valuable services, especially in securing a more reliable tenure for licenses, it has been suggested that the trade discharge some outstanding liabilities of Mfr Scott, mostly incurred in his election contests,

amounting to about \$11,000 - for that purpose some \$4500 have already been subscribed. Messrs Gilmour and Co. Hamilton Bros and our firm are giving \$1,000 each.

We have taken the liberty to make this statement to you as licensees of the Crown; particularly as one of the members of your firm told our Mfr. Bronson, while at the meeting of lumberers held in Toronto last winter that you would be willing to assist in this matter: and we assure you that any sum, which, in common with other members of the trade, you may consider the measure of your indebtedness to Mr. Scott will be kindly received by that gentleman -

We deem it but just to Mr. Scott, to add that this measure has not been undertaken at his solicitation, but is a voluntary offering and it is a subject of congratulation to those who have already subscribed, that they have been the means of saving his property from a sheriffs sale.

We would also request that you keep this matter strictly confidential, as a full knowledge of particulars concerning it would seriously injure Mr. Scott's influence in the House.

We remain,

Yours,

Bronson and Weston

(Source: PAC, Bronson Company, MG 28 III 26, Vol. 87)

Other instances of these instrumental relations between this "fraction of capital" and the State is reported to us by Gillis (1974). According to Gillis (1974:60), E.H. Bronson (owner of the Bronson Company) following his election to the Provincial Legislative Assembly in 1886, wrote to George Perley, owner of Perley and Pattee, offering his services: "If I can be of any service to your firm at any time during the session I would be very glad to have you call upon me." In his newly elected position in the Provincial Legislative Assembly, E.H. Bronson found scope for aiding his own business interests and those of other timber

and lumber firms. In 1888, he was named to a Select Committee of the Legislative Assembly which was to enquire into the extent of Ontario's natural resources and to recommend ways to develop and conserve these resources. By the end of the decade of 1880, transportation was considered an important aspect of reducing the costs of production in the timber industry because the manufactured wood could be shipped year round to the United States markets. Bronson's position in the Legislative Assembly enabled him to arrange meetings for two of the owners of timber and lumber firms with the Premier of Ontario to obtain subsidies to build railway lines. The case in point was the Canada Atlantic Railway owned by two lumber barons: J.R. Booth and William Perley, which required subsidies to build lines through Ottawa Valley towns and into Georgian Bay, thus connecting the region with existing lines to Montreal and the American border. Following the meeting with Premier Mowat of Ontario, subsidies were provided by the Province of Ontario (Gillis, 1974:62-64).

The close working relationships between the owners of the timber and lumber companies with some members of the State's legislatures are revealed further on other occasions. We find letters and telegrams from members of Provincial Legislative Assemblies, and the Parliament of Canada writing to the firms for information concerning

matters being brought before the assemblies so as to enable these members to present and defend the interests of the timber and lumber companies. For instance, in the case of the firm of Gilmour and Company, we find the Company receiving letters and telegrams from Members of Parliament in 1887 concerning cases brought before the House on the allocation of timber lots to prospective settlers.

30 March 1887

W.J. Poupore Esq. M.P.
Quebec,

Dear Sir:

We received the following today from Mr. Cormier (another M.P. my emphasis) viz "That matter being brought before the house please put me in possession of all papers." in reply to which we have written him today, and have asked him to show you our letter in which we have tried to explain our case to Cormier, particulars of which you fully understand, and which we trust you will put before the House as plainly as possible, as you know more about the trade and our situation than any of the others, trusting you will do all you can to have the Lots cancelled at once and get the Honorable Mr. Lynch to do the same, and prevent our having any further trouble.

(Source: PAC, Gilmour and Hughson, MG 28 III : Vol. 157)

Occasions of this nature are also repeated in the records of the Bronson and Weston Company. We find Members of Parliament writing to the Company requesting information to enable them to defend the timber and lumber interests in the House.

May 18 1869

Dear Mr. Bronson:

An important question will likely come up for discussion on Friday next. Would you kindly let me know the likely loss to the lumber trade in which you are engaged from the present condition of the Grenville canal. The question is on Banking on which I am opposed to the present policy of the Govmt owing to the great loss your trade would sustain. I require facts to convince the House and the Govmt of our position.

Quantity ship - Loss from delay en route. An answer at your earliest convenience would oblige.

Yours truly,

J.A. Grant

(Source: PAC, The Bronson Company, MG 28 III 26: Vol. 716)

This close association between some members of the State's institutions with the owners of the timber and lumber firms must not be construed as a condition whereby all members of the State's institutions are for the continued reproduction of the timber and lumber companies. Like any parliamentary democratic institution, there are other competing interests within these State Legislatures. Even though this is the case, the size of the operations of the timber and lumber companies - employing an average 2000 workers per company and having timber and lumber camps and farms which covered large areas in Ontario - provided the owners of these companies with a level of political power which was a force even other members of the Legislative Assemblies who were not supportive of the timber and

lumber industry had to heed and consider in their relations with these companies. This political 'clout' of the owners was acknowledged in the political circles of the times and is evident in the letters from the members of the Assemblies to the owners. For example, in one case, the issue centred on a member of Parliament pleading with the owners to refrain from influencing the electoral process against him.

Dec. 31, 1875 .

Mr. H.F. Bronson

Dear Sir

I am well aware that I do not represent your political opinions..... I represented this Riding in Parliament that my conduct with reference to questions affecting the interests of the lumber trade met with your approval: and, upon that ground I venture to ask you (not to support me for that I can hardly venture to do) but to refrain from using your influence against me.

Trusting that I have not ventured too far in thus addressing you and begging your pardon if I have.

I am Dear Sir,
Yours faithfully,
P. White Jr.

In another instance, it was to plead for electoral support in an election. The reply to the Member of Parliament outlined the extent of the political power of the timber and lumber owners.

Ottawa 2nd Aug 1872

Dear Sirs:

We duly received your letter of 24 ult. and have been thinking over the matter which it suggests.

While we would like well to see you in the House we cannot feel that we could consistently assist you.

4

Mr. MacDougall who is opposing you is a man with whom we have sustained business relations more or less for years and always of a satisfactory nature, and one with whom we have even been in terms of the most friendly character and to oppose him strongly now would be to give the lie to all our former expressions of friendship and esteem.

We think you will appreciate our position and trust you will accept the assurance of our good wishes instead of that active assistance which we feel under the circumstances that we cannot considerably give you.

We remain Dear Sir,

Yours faithfully

Bronson and Weston

J. O'Reilly Esq.
S. Renfrew

(Source: PAC, Bronson Company, MG 28 III 26, Vol. 95)

Because these owners had a sizable amount of economic power, they reinforced their close associations with the Members of the Assemblies who were for the timber and lumber industry by providing electoral support to these members and their political parties. We present letters to exemplify these actions.

Confidential

Ottawa 20th Aug 1872

Sir

Since writing to you under date of 30th ult. in reply to yours of 26th July, I have met many of my friends and business acquaintances from Renfrew Co. and, in compliance with your wish that I should render Messrs Macdougall and Findlay any assistance in my power, have expressed to them my strong desire that they should give you and your friends their support, for the reason that I considered them the best men before the electors of that county and without exception they have given me their assurance of that support.

I have also instructed my agents who have a large acquaintance among the electors to do all in their power to further their interests and I am confident that the Constituency in question will be represented in the next Dominion Parliament by your friends of the Reform Party.

I am, my dear sir,

Yours faithfully,

H.F. Bronson

Hon. A. McKenzie
Toronto

Ottawa 20th Aug 1872

Confidential

Sir

Your telegram of 17th inst was duly received.

In reply permit me to say that we wrote our Mr. McIntyre about the 10th inst to do what he could for you in the vicinity of Rockcliffe and I am of opinion that he will be able to control nearly all the votes there.

All along we have used our personal influence in your favour and confidently anticipate your return by a good majority.

You will oblige by holding the expression of our best wishes as strictly confidential.

Believe me, dear Sir

Very truly yours.

H.F. Bronson

J. Findlay Esq.
Pembroke, Ont.

It must not be assumed from the discussion to this stage that this fraction of 'capital' that owned the timber firms wielded limitless amounts of economic power and influence. The historical evidence we have presented of their political-economic practices in Canada during our period of examination tends to imply that these firms were a major force in **this area of the world-economy**. Arguably this is so, as Canada's role in the international division of labour at this stage was one of resource-exporting; and for the period examined, wood exports accounted for almost one-half to one-third of the exports of Canada. However, the circuits of capital of these firms were not completed in Canada. Instead, as we have discussed previously, the capital realization of the firms were completed in the core areas of the world-economy. This condition, therefore, pitted this fraction of 'capital' against other fractions of 'capital' in the core areas. As such, we find competition between them during periods of economic downturn when capital realization is further threatened. This is the case during a particular B-phase (1815-1850) of the world-economy and the dynamics of the struggle reveal the extent of the power of these firms.

The seeds of the competition between these fractions of 'capital' were sown during the Napoleonic Wars, when a series of tariffs were imposed by the British Government on

foreign wood entering Great Britain following the Continental Blockade. As a result, the wood products manufactured by the transnational firms operating in Canada became competitive with the foreign wood in the British market. By 1821; however, a reduction of the tariffs was made, lowering the level of duties to 5 1/2 times the level of the 1795 rate. Such continuance of tariff imposition on foreign wood impaired the operations of British timber houses that had their dealings in the Baltic and North European countries. In addition, the tariffs also affected English moneylenders and industrialists whose business operations suffered as a result of the economic slowdown in the Baltic countries (Ouellet, 1980:301). Well placed individuals such as Charles Poulett Thompson, involved in the Baltic trade representing British concerns, pressured the British Government to rescind the duties imposed on foreign wood entering Great Britain (Gillis, 1978:41; Latham, 1957:50). Thompson, who was President of the Board of Trade in Great Britain, was selected to head a Select Committee of the British Parliament to examine timber duties in 1835. Though the recommendations of the Committee were ignored by Parliament, the process had been launched for the removal of tariffs on foreign wood. This process was facilitated further by the stagnant economic conditions which Great Britain was experiencing between 1825-1842. Declining prices and chronic

unemployment were descriptive of this period. The lowering of duty on foreign wood could provide cheaper housing and rent for the labouring people of Great Britain, which, in turn, would lower production costs for British industrial enterprises.

Signs that the removal of tariffs would be forthcoming were met with strong resistance by owners of transnational timber and lumber concerns and colonial merchants.

Allan Gilmour, partner in the firm of Pollok, Gilmour and Company, when presenting evidence before the Select Committee on Timber Duties of the British House of Commons (1835), warned of the economic disaster that would follow in British North America if the duties on foreign wood were rescinded. It would even affect, he argued, the industries of Great Britain, because the Atlantic timber trade and the northern colonies absorbed a significant amount of British manufactured products. Later in 1851, in a letter to the Morning Herald, Allan Gilmour contended that the reduction in duties on foreign wood would generate bankruptcies for timber and lumber firms in British North America because the freight from the colonies were 30s to 33s a load in comparison to 15s to 18s a load from ports of Norway (New Brunswick Museum, Gilmour and Rankin Collection). Statistics were provided by the firm of Pollok, Gilmour and Company showing that rents and housing for the labouring people in Great

Britain would not be reduced even if the timber duties on the foreign wood were lowered - this being one of the issues behind the British Government's move to lower foreign timber duties. Such persistence continued on the part of the firm, and on March 5, 1851, the Company wrote to Lord John Russell, First Lord of the Treasury. The letter complained about the unfair competition which the Company's products were suffering *vis-à-vis* foreign wood with the continued removal of tariffs on foreign wood (New Brunswick Museum, Gilmour and Rankin Collection).

It is also interesting to note that such virulent defence of British North America was put forth by a Company that had transferred the profits it made in British North America to Great Britain and had its owners living in Great Britain. In fact, Pollok, Gilmour and Company's lobbying was joined by the Legislative Council and Assembly of the Province of New Brunswick, as well as the Quebec and Montreal Boards of Trade (New Brunswick Museum, Gilmour and Rankin Collection; Knight: 1956). In November, 1835, 5000 businessmen and interested parties in the timber trade in British North America prepared a petition and sent it to the Imperial Parliament (Ouellet, 1980(a):399). This was followed again in April, 1842. Involved in these Legislative Assemblies and Boards of Trade were colonial merchants and smaller owners of timber and lumber enterprises in British

North America whose economic interests were threatened should all the duties on foreign wood entering Great Britain be removed. Thus we find, for this period, a concentrated lobbying by certain capitalist 'fractions' in Britain and British North America who were involved in the economic processes of the colonies. Their efforts were futile as the British Government continued to remove duties on foreign wood with reductions in 1846, 1851 and 1860, and by 1866, wood products manufactured in the colonies no longer enjoyed the preferential treatment they were accorded during the Napoleonic Wars.⁴⁵ Clearly, therefore, such occasions reveal the extent of the power of these transnational timber and lumber companies operating in British North America.

⁴⁵ The lifting of tariffs on foreign wood in Great Britain does not mean that the timber and lumber industry in British North America was completely thrown into economic disarray. The timber and lumber companies countered these adverse conditions by lowering the costs of their operations. Expenditures for the timber trade were reduced to a minimal level through the use of old ships, and employment of crew at low wages fed with cheap food (Lower, 1973). Furthermore, government-built timber slides facilitated the transport of logs from the timber limits to the lumber mills, thus reducing the time before the logs could be turned into manufactured lumber. In this way, the velocity of realization by which 'commodity capital' is transformed into 'money capital' becomes accelerated by one season. As well, at this time, the loss of the British market suffered by the transnational timber and lumber firms was replaced by a growing demand in the United States for their wood products.

This review of the political-economic practices of the timber and lumber companies has provided us with a more revealing picture of the dynamics of the accumulation of capital in Canada during the 19th century. It has outlined briefly, the extent and limits of the political-economic power and influence the owners of these timber and lumber companies possessed. Besides being susceptible to the "intra capitalist class competition" which is a feature of capital accumulation, the business operations of these firms were also affected by other features of the world-economy such as its periodic transformations. Being a part of a series of commodity chains of the world-economy, these companies, like all the other capitalist enterprises, were exposed to the vagaries of the dynamics of capitalism as a mode of production. In other words, these enterprises were subjected to the periodic economic downturns (B-phases) that are immanent and depictive of the world-economy. How did these companies fare during a downturn of the world-economy? We proceed in the next chapter to examine their operations during a specific downturn period (1873-1896), in order to obtain a fuller appreciation of the accumulation processes of these companies in the 19th century capitalist world-economy.

CHAPTER 5

'CAPITAL' IN 'CRISIS': B-PHASE AND THE OPERATIONS OF
TRANSNATIONAL TIMBER AND LUMBER COMPANIES,
CANADA 1873-1896

5.0 INTRODUCTION¹

Periods of stagnation (B-phases) of the world-economy are crucial moments, for they reveal the immanent contradictory tendencies of capitalism as a mode of social organization and production.² *Lato sensu*, these periods³ can also be treated as times of revitalization - considering that the principle motor force of the world-economy is the continuous drive towards capital accumulation - whereby the incessant growth in the previous expansionary phase (A-phase) is pared away with the expulsion of inefficient

1 A shorter version of this chapter was published earlier under the title "Capital in Crisis: Stagnation and Timber Company Operations, Canada, 1873-1896" in Crises in the World-System, Albert Bergesen (ed.), Sage Publications, 1983.

2 In this chapter we are using the words downturn and stagnation interchangeably to depict the B-phase of the periodic behaviour of the world-economy.

3 The periodization of these periods of stagnation has been attempted by the Cyclical Rhythms and Secular Trends Group at the Fernand Braudel Center (see Research Working Group on Cyclical Rhythms, 1979:483-500). We further assume that capitalist growth is non-linear and that expansion and stagnation phases constitute the growth pattern and dynamics of the capitalist world-economy.

producers and lines of production, thus setting the stage for renewed expansion in the subsequent phases (see for ex. Wallerstein (1984(c):572)). *Ergo*, downturns are moments of consolidation of economic processes, of transformations of production systems, and of realignment of states in the interstate system. These periods, therefore, are turbulent times for the social institutions of the world-economy, and in our case, the business firm.

Because the world-economy constitutes a cross-cutting network of interlinked production processes, defined as commodity chains, perturbations in the system caused by stagnative economic conditions in the core areas of the world-economy are transmitted in "chain-like" effects to the other sections of the interlinked production processes located in the other areas of the world-system. The result of this is that, at the level of the firm, downturns in the world-economy reflect the problems firms have in meeting their valorisation and accumulation processes. Such difficulties experienced by firms in completing their circuits of capital realization engenders transformation and upheavals in the production process and its associated labour relations. As demand for the firms' products is sluggish and profits decline, certain actions are attempted by the firms to maintain their profit levels and share of the market. These "business maneuverings" are achieved through various

ways such as by extracting a higher rate of output from the production workforce through raising the intensity of work or by reorganizing the labour process. Market share can also be increased through mergers, underselling or just benefiting from others' foreclosures. No doubt, some or all of these actions are taken by firms to weather the various contingencies they face during a stagnative period. Furthermore, as capital accumulation circuits occur within networks "defined, guaranteed and informed by state centred processes", we find that during a downturn, state activities and policies in the form of tariff barriers emerge and are enacted to protect markets so as to overcome such periods of stagnation.

With such a perspective of understanding social reality, how does it relate to historical conditions, and especially in our context, the operations of timber firms in late 19th century Canada? The intent of this chapter is precisely to provide evidence for this manner of summarizing social reality through an examination of a B-phase in the world-economy (1873-1896), and how the operations of the timber firms fared during such a period. In the process, a clearer idea of how firms reorganize and reconstitute themselves during periods of stagnation will emerge, and thus will facilitate our understanding of the processes and dynamics of capital accumulation in the world-economy. It

is to these issues we now turn in our examination of the operations of transnational timber firms in Canada during the B-phase of the late 19th century world-economy.

5.1 BARRIERS TO CAPITAL REALIZATION: THE CAPITAL CIRCUITS OF THE TRANSNATIONAL TIMBER AND LUMBER FIRMS IN THE LATE 19TH-CENTURY WORLD-ECONOMY

Ab initio, the circuits of capital of the transnational timber and lumber companies operating in Canada were completed ('money-capital' is realized) mostly in other parts of the world-economy such as Great Britain and the United States. Considered as a commodity chain⁴ of the capitalist world-economy, the timber and lumber products of these firms provided the necessary raw materials for the construction of ships, buildings, and patterns for metal foundry and engineering works in Great Britain and the United States. The operations of these companies as inputs to the production processes of the core underline the **substantive interdependence** between core and peripheral productive activities in the world-economy. This integrativeness of productive activities also **conditions** the realization of

⁴ This concept of commodity chain is discussed in the work of Hopkins and Wallerstein (1977). A more extensive explanation can be found in a research proposal by Hopkins and Wallerstein (1982): *Commodity Chains in the Capitalist World-Economy* (mimeo).

capital of these firms. It means that any slow-down or drop in the consumption of wood products in the core areas is translated into a barrier whereby the 'money-capital' invested in peripheral areas to produce these products for core consumption cannot be realized (in other words, 'commodity-capital' cannot be transformed into 'money-capital'). To put it in another manner, any slow-down in the consumption of peripherally produced wood products in the core thwarts the circuit of capital of the transnational timber enterprises with operations in Canada.⁵

In addition to this barrier, the very nature of the capital circuits of these firms, makes them susceptible to disturbances. The distance to the markets for these wood products - taking into consideration the level of development of the communication system - would mean that effective demand for them could not be determined at the start of the production process, and would only be realized after the wood products had reached the market which sometimes took from one to two years. This would cause capital realization problems for these firms, especially during periods of

⁵ At the level of the world-economy, such slow-downs in consumption is inherent in the structural conditions of the capitalist production process with its anarchic nature of expansion that exceeds the demand of those in concrete capitalist relations of production, thus leading to over-production (Marx, 1968(b); Hopkins and Wallerstein, 1977).

economic depression, whereby these firms would try to maximize opportunities during the short term growth through increased production, only to find effective demand curtailed by the time the products reached the markets.

Furthermore, because of the distance to the markets, the long period of the circulation means that the "velocity of realization" of invested capital is much slower than other business operations. Such a long period of circulation makes these firms more susceptible to economic disturbances, especially when **extensive credit** is used.

Besides the above potential barriers, there is also the barrier inherently generated by production operations of the timber and lumber companies through the intensive and exploitative use of nature that would curtail the continued reproduction of these firms.⁶ In this case, the conditions became more acute in the late 19th century following a century of unceasing exploitative harvesting of trees.⁷

Notwithstanding the barriers discussed above, competition between these firms operating in Canada with those firms whose operations are based in other parts of the

⁶ For a succinct account of Nature as a barrier to the growth of capital see Lebowitz (1982:7-16).

⁷ In this part of the world-economy, the forests were being chopped down to harvest for trees. In other parts of the world-economy, deforestation occurs as a result of capitalist penetration to cultivate crops for export (Tucker, 1983).

world-economy, such as in the United States and the Baltic region, cannot be discounted.⁸ Such competitive activity becomes even more acute in the downturn of the world-economy. Especially in the case of the Baltic region, we find that after 1866, Great Britain had rescinded all of its duties on foreign wood, thus making the wood products of the Baltic competitive with those from Canada in the British markets.

These were the barriers and conditions faced by the transnational timber and lumber companies during the stagnative economic conditions of the late 19th century capitalist world-economy. The manner in which these companies handled the depressive period not only shaped their future business operations but, as well, transformed the social relations of production [operations].

⁸ Or as Wallerstein (1983:33) puts it: "Acute competition among capitalists has always been one of the *differentia specifica* of historical capitalism". For a theoretical discussion on the rate of accumulation of particular capitalists and how competition plays an important dimension in this process see Wallerstein (1983(a):16-17).

5.2 WOOD MARKET CONDITIONS IN THE CORE 1873-1896

Stagnation was the prevailing condition of the world economy during the period of 1870s to 1890s.⁹ The annual compound rate of growth of world trade for the period dropped 3.3% from the previous period of 1840-1870 (Mandel, 1980:2-3). Gaston Imbert, in calculating indexes of per capita world production, shows the index for the period of 1874-1896 dropping 1.4 from a level of 2.2 of the previous period (1850-1873) (Mandel, 1980:4). Table 5.0 reports on Imbert's calculations showing the "A-phases" of expansion and the "B-phases" of stagnation at the world level *vis-à-vis* per capita world production.

Besides declines in per capita world production, wholesale price series at the national level such as those for England, United States, and France, all indicate a decline for this period (Kondratieff, 1979:524-525). Gordon

⁹ The data for this stagnative period of the world-economy varies for different scholars. The Research Working Group on Cyclical Rhythms and Secular Trends (1979:499) brackets the period from 1873-1897. Mandel (1980:30), on the other hand, pinpoints this stagnative phase as between 1873-1893. In a review of long waves and labour force formation and segmentation, Gordon and his colleague (1982:43) list the stagnative period as between 1878-1894. Notwithstanding these variations, all these scholars assert that there was a stagnative period and it stretched from 1873-1897. Van Duijn (1983:157) has also proposed different dates for this downswing period in the late 19th century for different countries. For example, for the United Kingdom the downswing period was 1873-1890, whereas for the United States and Germany they were 1873-1895 and 1872-1890 respectively.

Table 5.0
Indexes of Per Capita World Production
1850-1933

Years	Index
1850-1873	2.2
1874-1896	1.4
1897-1913	1.72
1914-1933	-0.49

(Source: Mandel, 1980:4)

et al (1982:43), reviewing the economic performance of four countries (United States, United Kingdom, Germany, and France) during this period, also confirm these stagnative conditions. Table 5.1 provides a breakdown of the average annual percentage growth in real output for the economies of these four countries by phases of expansion (A-phase) and stagnation (B-phase).

Table 5.1
Annual Percentage Growth in Real Output
1846-1938

Year	United States	United Kingdom	Germany	France	Weighted Average
1846-1878 (A-phase)	4.2	2.2	2.5	1.3	2.8
1878-1894 (B-phase)	3.7	1.7	2.3	0.9	2.6
1894-1914 (A-phase)	3.8	2.1	2.5	1.5	3.0
1914-1938 (B-phase)	2.1	1.1	2.9	1.0	2.0

(Source: Gordon et al, 1982:43)

Sine dybio, this evidence confirms that during the period of 1870s to 1890s there was a stagnation in growth of the world economy. The countries in the core zone as indicated above, suffered declines in annual percentage growth in real output. With substantive interdependence between core and peripheral production processes, such slow-downs in the core are translated to the peripheral and semiperipheral areas. It meant, therefore, a low demand for products of the peripheral and semiperipheral areas of the world-system. Van Duijn (1983:157) reports such downturn conditions being experienced also during this period in countries such as Canada, Norway, and Sweden. For example, in Canada, between 1874-1879, exports of forest products declined by 48% in value and 44% in volume (Chambers, 1964:399).

Such an overall state of the world-economy meant that in the core areas such as Great Britain, there was a dullness in the demand for timber and lumber products. The sluggish sales of wood and the depressed conditions in Great Britain were revealed by the Canada Lumberman (June, 1883), a trade newspaper. Profiles of the British wood market were described by the newspapers: "the import has been moderate and the consumption unusually dull and languid; fortunately stocks are not heavy, and there can be little chance of any improvement until the general trade of the country shows more activity". Statements such as "the lumber trade is in

a "depressed and unsatisfactory state " or "there is a general admission of bad trade, and the government returns to some considerable extent corroborate it" are found in the Canada Lumberman throughout the 1880s. These conditions are also confirmed by the wood circular of Simson and Mason Ltd of London. The circular reported decreasing consumption even though prices were low. Much of this condition was attributed to the depressed state of the building trade in Great Britain. The low demand for wood products was accentuated further by the slow-down in shipbuilding activity in Great Britain which in the past had absorbed significant quantities of imported wood, especially from Canada. Such decreasing trends in shipbuilding activity were recorded by the Canada Lumberman (1886). For example, in 1884, the newspaper commented that the tonnage launched in Glasgow was 299,199 tons worth £7M compared to 417,881 tons in 1883 worth £10M. The situation grew worse in 1885 and 1886, when only 296,884 tons and 195,454 tons were launched respectively.

The above conditions were generally depictive of market demand for wood products in Great Britain for the period between 1873-1896. There were, however, certain years (1880, 1889, 1892) within this period that showed signs of recovery of the wood trade. On the whole, however, the period can be described as one of depressed demand for wood products.

The conditions found in Great Britain for this period were repeated for the United States. The low consumption of wood as a result of stagnating economic conditions was discussed in the proceedings of the Select Committee on the Course of the Current Depression of the Canadian House of Commons (1876). The Committee reported a low demand for timber and lumber products in the United States, citing the case of the city of New York where 3900 carpenters out of a total of 7800 were unemployed on February 1876. Edward Chambers (1964:398), reviewing late 19th century business cycles in Canada, has also reported a levelling-off of demand for imported lumber in the United States in mid-1873. This can clearly be seen in the exports of wood products to the United States from Canada which fell from a high of \$29,000,000 in 1873 to \$13,000,000 in 1878 (Lower, 1938:152).

Virtually, therefore, the downturn in the world-economy meant a diminished demand in the core areas for timber and wood products produced in the periphery. The market for wood products during this period (1873-1896) was soft and thus the conditions for the realization of capital ('commodity-capital' being transformed into 'money-capital') for the transnational timber and lumber companies were precarious.

5.3 THE OPERATIONS OF THE TIMBER AND LUMBER COMPANIES DURING THE DOWNTURN OF 1873-1896

5.3.1 Barriers to 'Commodity-Capital' Transformation

Besides the years of 1880, 1889, and 1892 when the demand for wood produced in Canada was stronger, the period between 1873-1896 was a depressive time for timber and lumber products in the core areas such as Great Britain. This sluggishness of the wood market generated a slow-down in the sales of the timber and lumber firms operating in Canada. Communications between these companies and the timber merchant houses in Great Britain throughout the period indicated that the latter were not in a position to place firm orders for timber and lumber products. A letter from the files of one of the branches (Gilmour and Co.) of the firm Pollok, Gilmour and Company outlines such conditions (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 30).

Dobell Beckett and Co. Quebec
Montreal
Richd. R. Dobell and Co. London

Quebec 3 Feby 1891

Messrs Gilmour and Co.
P of Que.

Dear Sirs

We regret very much that we have not been able to send you a positive offer for your wintering stock of deals. We have been in constant communication with London, exchanging as many as two or three telegrams per week, with a view to being placed in a position to submit you such an offer as would lead to business as we are very desirous to secure your deals, and feel that we could work together in the future; but unfortunately at the

present moment, things are so terribly demoralized in London, owing to the failures of P. Nolton and Co. and Simpson and Mason, that we see clearly they do not feel like going into any large operations until matters have settled down. This seems to be the purport of their cables to us, and we think the present is hardly a favourable opportunity for either buyer or seller to come to business.....

D. Beckett and Co.

Such a slow-down in sales meant that the market on occasions was over-stocked due to the accumulation of unsold wood. Consequently, by 1882 prices of wood fell in Great Britain (Canada Lumberman, 1882). In fact, certain prime timber from Canada was sold at prices under the cost of importation. The falling prices of timber and lumber products plus the sluggish sales affected the 'capital realization' of the transnational timber and lumber companies operating in Canada.

Pari passu, competition from other companies operating in other parts of the world-economy *vis-à-vis* sales in Great Britain and the United States also occurred during this stagnative period. The major competitive threat to the companies' sales in Great Britain came from firms operating in the Baltic countries. For sales in the United States, competition to the companies came from firms operating in Michigan and Wisconsin. Competition from Baltic suppliers was evident by the increase in Baltic wood imports in the British market between 1882-1890 (see Table 5.2). Supplies from the Baltic region, especially from Sweden, led to a

Table 5.2
Comparative Arrivals of Wood Cargoes in London, 1882-1890
(in tons)

	1882	1883	1884	1885	1886	1887	1888	1889	1890
Sweden and Finland	349,920	336,792	382,034	346,077	310,013	288,636	236,031	275,882	271,184
Norway	108,926	110,732	92,085	77,312	68,923	68,923	65,551	68,818	47,033
Memel and Dantzic	64,210	76,109	58,860	48,202	35,412	45,814	34,375	40,624	40,826
Peterburg and Riga	105,707	103,716	96,590	115,613	78,825	61,938	64,488	81,815	70,047
Archangel and Onega	21,146	15,611	23,051	21,962	21,400	20,383	13,201	20,781	16,611
Canada	107,537	129,672	121,895	128,833	124,456	83,455	49,244	62,439	102,929
New Brunswick and Nova Scotia	26,493	33,727	14,794	20,760	13,494	5,150	8,831	5,290	2,295

(Source: Chew, 1931:231).

large accumulated stock in England and Scotland. A review of Simson and Mason Ltd., London Wood Circular of 1887 and 1890 reflects this trend. The competitive edge which Baltic wood products had over those manufactured in Canada was mainly attributable to freight charges. By 1881, pine deals produced in Canada had an extra 20% freight charge added to their prices, whereas the prices of pine deals from Norway included a freight charge of only 15-16% (Canada Lumberman, 1881). This condition led the Canada Lumberman (1887) to conclude in 1887 that "the competition of Baltic timber in the English markets has affected the export trade [of Canada].".

The impact of these conditions upon the operations of the timber firms in Canada was severe. For these enterprises, the heavy influx of Baltic wood with its advantageous pricing and the depressed wood market in Britain led to a slow-down in sales. The situation is described vividly in the correspondence between British lumber merchant houses and the timber companies. It is evident in the business records of 1888-1891 of Gilmour and Company (PAC, Gilmour and Hughson, MG 28 III 6, Vols. 85, 30), where we find such conditions of unsold pine deals in Britain.

"We may tell you, but have no wish to have it repeated that pine deals are now so unpromising in England that there seems little chance of unsold cuttings, realizing prices we paid you - we have instructions not to extend purchases, even if contracts could be made under your figures".

"..... as regards, pine deals, that it is only fair to tell you we do not now feel inclined to purchase a large cutting of pine deals, even though the price might be a tempting one. Our views are so low on this point that we think you could hardly tempt us in the matter of price, and this Mr. Dobell will confirm personally when he has the pleasure of seeing you".

This curtailing of sales meant that the circulation of capital for the transnational timber and lumber firms could not be completed, i.e. 'commodity-capital' could not be transformed into 'money-capital'.

The condition of low sales was aggravated further by the inability of some of the timber firms' customers, such as retail lumber merchants, to repay their accounts. We find letters in the files of Gilmour and Company of retail lumber merchants writing for an extension of credit terms. For example:

James Moir
Lumber Merchant

Albany N.Y. 5th Sept 1889

Mess Gilmour and Co
Ottawa

Dear Sirs:

You will please find here with note in settlement of your invoice 3rd into which we trust will be found, all in order, and satisfactory.

Trade the last month or so having been exceedingly quiet with difficulty in making collections from our customers and having a large block of the mill River ten inch piled on our yard. We are going to trespass on your good nature to the extent of asking you to get your Bank to discount the enclosed sixty day note for \$2000.00 and send us the avails in time to assist in paying over note falling due on the 14th inst. I know you do not like

doing this and we more than regret having to ask you to and would not do so if we could avoid it but in some way or other we got more payments into this month than we should have done. Trusting you will meet our wishes in this matter.

Yours very truly
James Moir

The situation grew worse towards the end of the 1880s with evidence of retail lumber merchants going bankrupt. The Annual Wood Circular of Robert Curwen and Sons of Liverpool (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 21) reports of such closures, and in 1887 it noted that some smaller firms in Liverpool of "having succumbed" to the poor wood trade conditions. In fact, such a circumstance can also be seen in the correspondence of the Gilmour and Company when, on 29th January 1890, the firm accepted 20% of what lumber merchant James Moir of Albany, New York, could pay to his debt (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 64).

The business failures of these retail lumber outlets added more strain to the manufacturing operations of the timber and lumber enterprises. The non-realization of funds from the sale of wood products to the retail lumber merchants meant a further constriction of the timber companies' money supply. Added to this difficult situation was the relatively low consumption of manufactured wood products necessitating these timber firms to carry over some of their stock to the next season. We find reports of such stock-piling in the Canada Lumberman (1883) where there are

commentaries on the retail lumber merchants refraining from the purchase of lumber, thus forcing the timber enterprises to carry over almost 2/3 of their wintering stock. In the record books of ~~the~~ timber firms, we also discover evidence of lumber and timber stocks remaining from the preceding year in their lumber yards (see for ex. Gilmour and Hughson, 1884:Vol. 400). What it indicates is that for these firms the realization of funds, which was quite extended originally, was further increased due to the conditions of non-completion of sales. ¹⁰

Such a state of affairs might not be serious if the capitalist enterprise has enough monetary funds to allow it to weather such a 'depressive storm'. But in the case of the timber and lumber companies, where extensive credit from financial institutions is utilized, such a delay in the metamorphosis of commodities into 'money-capital', becomes critical. The Canada Lumberman (1883) related incidences where smaller timber and lumber companies with extensive lumber stock carried over from the previous season's cut were in dire financial difficulties. Eventually, these

¹⁰ In Marx's opinion (1968(b):115), such a situation leads to crisis, "if the interval in time between two complementary phases of the complete metamorphosis of a commodity become too great, if the split between sale and purchase become too pronounced, the intimate connexion between them, their oneness, asserts itself by producing a crisis".

firms had to close their doors as the lending monetary institutions were demanding repayment of notes discounted. In the records of the companies we have examined, we find substantial loans made by these enterprises for their business operations to meet the downturn conditions. For one of the branches of Pollok and Gilmour, Gilmour and Company (see Tables 5.3 and 5.4), the amount of funds secured from the bank seemed to increase progressively over the years 1880-1885, even though their production of cut timber¹¹ had not. Furthermore, from the minute books of the Director's meetings of the Molsons Bank (1890-1895) we find that Gilmour and Company was experiencing severe difficulties in repaying its loans at the appropriate time and thus had the due dates of these loans carried over to a later year. By 1890, the branch owed the banks, in addition to the working capital advanced, \$520,309.50 (at 1900 constant dollars) forwarded

¹¹ It must not be assumed from our data that the Molsons Bank was the only bank with which Gilmour and Company was associated. Several other banks, such as the Canadian Bank of Commerce, and the Quebec Bank, were also involved in the provision of operating capital to the timber and lumber company. Because of sparse bank records, and the restriction placed on access to these documents by the Canadian Bank of Commerce, it is impossible to compute the total amount of loans secured by the branch to finance its operations. However, what has been presented can give us an idea of the extent of the loans obtained from one bank. And in certain instances, we can derive an idea of the total amount of loans obtained by the branch if the loans were arranged conjointly with two banks.

Table 5.3

**Amount of Loans by Gilmour and Company
with Molsons Bank (1900 constant dollars)**

Year	Amount
1880	131,463.75
1882	208,335.00
1883	105,769.30
1884	90,497.80
1885	148,515.00
1887	190,244.00
1888	189,036.00
1890	217,601.60
1892	259,067.35
1894	446,254.05
1895	453,001.12
1896	406,738.85

(Source: Chew, 1983:294)

Table 5.4

**Volume of Lumber Cut by Gilmour and Company,
1879-1896 (million feet)**

Year	Amount
1879	30
1881	70
1889	40
1890	35
1891	30
1893	15
1894	40
1896	20

(Source: Chew, 1983:294)

from previous years. In 1892, we find the firm in a more precarious situation, still indebted for \$1,136,787.50 (at 1900 constant dollars) in addition to the advances made for the 1892 season. The financial liability of the company was

even worse by 1895. By this time it had unpaid loans amounting to \$1,319,365.70 (at 1900 constant dollars), besides the amount forwarded by the bank for the season's operations. Moreover, a memo submitted to the Director's meetings of the Molsons Bank by its General Manager, reveals the inordinate extent to which Gilmour and Company's production of wood products was committed to pay off their indebtedness (Molsons Bank Minute Books, 22nd July 1890).

This degree of reliance by the company on the banks for its operating capital meant that it had to be quite "subservient" to the wishes and demands of the banks. We locate in the minute books of the Molsons Bank, entries indicating that on all occasions the Gilmour and Company acceded to all the proposals made by the banks. For example, we read entries in the minute books of the Director's meetings of the Molsons Bank (1894, 1895) cautioning Gilmour and Company that it must attempt to sell off its produced lumber and, as well, not to increase the size of its timber operations without first informing the bank.

"The General Manager reported on the discussion Messrs Walker and Plummer of Can. Bank of Commerce, Mr. Dunford and the Messrs Gilmours, in reference to the latter a/c. The understanding being that if they cannot sell the sawn lumber now on hand amounting \$600,000 the advances for coming season should be at all events reduced to the lowest possible limit".

"The Messrs Gilmour' appeared before the Board and after fully explaining their position, it was agreed to carry them over this season allowing their line to run to

\$400,000 the Canadian Bank of Commerce agreeing to a credit of \$800,000. It was also understood that they should give us Life Insurance - it was also agreed to between the bank and Messrs Gilmour that they should place no men in the woods in the fall of 1896 without cautioning of the two banks".

From the letters of the Merchants Bank of Canada to Gilmour and Hughson Company (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 143) we find again another bank requesting actions to be taken before loans can be secured.

Merchants Bank of Canada

Messrs Gilmour and Hughson
Hull Quebec

Montreal 25 Oct 1893

Dear Sirs,

Your favour of 17th inst was duly received, and I am glad to learn that your cutting is progressing so favourably.

The amount you name is very heavy indeed, and quite unusual, unless a very large stock of logs and lumber has to be carried over from unforeseen circumstances. It will be especially heavy if the winter, as is most likely, proves to be a difficult one financially involving a great scarcity of money as it progresses.

I would suggest that you might make some arrangements to defer payment of crown dues, in which case, the amount to be carried over would not be so excessive.

In view of this large amount referred to above, I conclude that you will arrange for a much smaller amount of new advances. I shall be glad to hear further from you.

and I remain.

Yours very truly

In exchange for further loans to maintain operations during the depressive period, the timber and lumber companies had to pledge some of their timber limits to the banks

as collateral security. For example, a letter from one of the branches of Pollok, Gilmour and Company, Gilmour and Company, to the Quebec Bank reveals the extent of the branch's commitment to the bank.

13th Dec 1889

Mr. V. Noel Esq.,
The Quebec Bank,
Ottawa

Dear Sir:

We herewith beg to enclose copy of letter from Crown Timber office, Hull, dated 2nd Oct, acknowledging receipt of our letter of 10 Sept, in which we ask to have certain Timber Berths pledged to the Quebec Bank. We also beg to enclose Licenses for 1888/9 of the following Timber berths, which can be pledged to the Bank, as well as those referred to in our letter of 10th Sept viz

License No	353	of	1888/9	River	Gatineau	55 1/4 miles
"	354	"	"	"	Ottawa	50 miles
"	355	"	"	"	do	50 miles
"	356	"	"	"	do	50 miles
"	357	"	"	"	Gatineau	41 miles
"	358	"	"	"	do	36 1/4 miles
"	359	"	"	"	Ignace Creek	Gatineau
						5 1/2 miles

Yours truly

Gilmour and Company

(PAC, Gilmour and Hughson, MG 28 III 6, Vol. 160)

The above actions made these companies further dependent on the financial institutions and this further undermined the limits of their operating actions and choices during the stagnative period of 1873-1896.

Furthermore, throughout the period of 1873-1896, we find reports in the Canada Lumberman (1883) of incidences of

timber and lumber firms having their timber limits, which had been used as collateral, put up for bids by banks because of defaulted loans. By 1890, due to the depressed conditions in the timber and lumber sector, the banks had refused to accept timber as collateral security (Canada Lumberman, 1890). In Gilmour and Company's case, the firm, in 1891, informed the Quebec Bank that it proposed to sell its timber limits in order to settle its loan with the bank.

17th March 1891

James Stevenson Esq,
Quebec Bank.

Dear Sir

We propose selling our timber limits so as to pay part of our account to the Bank and intend advertizing them at once, the writer mentioned this to Mr. Noel and he thought it a good idea.

Yours truly

John Gilmour

(PAC, Gilmour and Hughson, MG 28 III 6, Vol. 161)

Such was the business environment in which the timber and lumber enterprises had to operate during a downturn. The power and control of the financial institutions over the industry during this period should not be overlooked. The banks wielded considerable control over the business activities and decisions of the firms through a tight control of the approval and renewal of loans made to the timber and lumber companies. Conditions of approval and renewal of

loans required reduced production of timber and lumber products if necessary, and a low retention of accumulated stock. In fact, the trade newspaper, the Canada Lumberman (July 15, 1881), has also raised such tight monetary control of funds available to the timber and lumber companies by the banks during the downturn.

5.3.2 Operating Strategies During the Downturn

Operations

The very nature of capitalist production processes has the tendency to display an anarchic nature of expansion leading to over-production, consequently generating crisis conditions when the manufactured commodities cannot be metamorphosized into 'money-capital'. What results is an overstocking of commodities. Such a situation is the result of the non-coordination and competitive nature of capitalist production along with its tendency towards increasing mechanization that leads to over-production because of a level of consumption that is determined by the existing relations of production and the exigencies of capitalist production. To prevent such a condition from developing further, capitalist firms invariably reduce their production levels.¹² But such cutbacks in production levels are not a permanent feature of

¹² For example, in 1883 we find the transnational timber and lumber companies reducing production according to reports in the Canada Lumberman (1884).

the capitalist enterprise. Whenever the opportunity presents itself, such as improving prices and demand, production levels are accordingly increased to maximize financial returns. Or in certain instances, production levels are maintained in order to ensure a certain level of profit.

The operations of the timber and lumber firms reveal such an orientation towards meeting the depressive conditions of the late 19th century. Production levels were reduced when conditions were bad and they were increased when demand and prices were good. The manufacturing output of selected timber companies that we have examined discloses these characteristics of expansion and contraction (see Figure 3.0). The levels of production increases and decreases resonate with commentaries on the depressive business environment during the downturn in the 19th century world-economy (Canada Lumberman, 1884). However, the companies' attempts to adjust their production levels to business conditions were hampered by the **peculiar nature of their capital circuits**. Because of the immense distance to the markets and the extended time affecting the velocity of realization between producing the commodity and final consumption, the timber firms' reactions to market conditions were necessarily delayed. Thus, most efforts to adjust immediately to a revived market were ineffective. What this means is that, in general, the timber and lumber companies,

Figure 3

Total Amount of Lumber Produced by Selected
Timber and Lumber Firms in Canada by Year

(Source: Chew, 1983:297)

occasioned by a bouyant market, increased their production, operating levels only to face a depressed demand after the commodities had reached the market. In 1890, the Canada Lumberman (1890) summed this up succinctly: "it seems clear that tempted by the high prices of late years, manufacturers have over-produced".

In the business records of Gilmour and Company there are disclosures of such strategies utilized by the firm to weather the disappointing economic climate, especially the depressive conditions between 1890-1893. We find letters from the company in 1890 to its managers in charge of wood

and farm operations, informing them to cut back on logging operations, crops grown, and animals reared (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 160). Workers were also dismissed from the farms in order to reduce costs. Adding to the worsening business environment, we find overproduction by both the timber firms in Canada and the Baltic prior to 1890. As a consequence, the market for wood products in Great Britain was oversaturated. We learn of such a situation from letters by British timber merchants to Gilmour and Company. For example, a letter from Robert Cox and Company, Liverpool, dated March 1891, informed Gilmour and Company (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 21) that lumber stocks in the Liverpool market "are excessive timber trade generally in a very "panicky state", the demand is "dull" and the "stocks held is more than ample and recent sales have been at a decline in value". The reason given by Robert Cox and Company was: "the moral is simple the manufacture of lumber the last two years in the Baltic and also in Canada has been excessive, the result being heavy losses to importers and shippers, and very large and numerous failures. Unless there is reduction in the production, prices will go lower still, and disaster will surely follow".

To survive further these depressive conditions meant that the timber companies had to undertake severe measures to meet the crisis. The general route taken was the reduc-

tion of the wage levels of the workers in order to lower production costs (see Report of the Select Committee on the Causes of the Present Depression, 1876:3). This reduction of wages included also those in supervisory positions. A letter from the files of Pollok and Gilmour outlines this strategy.

Gilmour and Company,
Lumber Merchants

Ottawa, Ont 22nd Nov. 1889

Dear John

I herewith beg to give you memo of salaries ending 31st Decr, which you might look into so that when you can come in, we can go over them together and decide upon what should be allowed for the coming year

viz	H. Donnelly	3500
	J.W. Fenton	2000
	David Evans	1300
	J.R. Hamilton	1300
	A.E. Maxwell	1400
	J.C. Gordon	1000
	Robt Milne	1200

I told Donnelly the other day that we were reducing salaries all round, as we were obliged to, and that I would see you and decide upon what we would allow him for next year, he must have expected to have his salary reduced, as he said, he supposed it had to be done, and expenses curtailed all round, he has reduced all the foremen on the farms with exception of Miller to \$20.00 per month, and wanted to know if he should be reduced as well. I dont know what to do with Gillespie, who will soon finish all he has to do at Ironside, and is not wanted by Donnelly up the River, his time is not up till 1st May next.

Your affect Bro

Allan Gilmour

P.S. Copies of reports of Bronson and Benson Bennett Limits are ready to be sent out by first opportunity.

(PAC, Gilmour and Hughson, MG 28 III 6, Vol. 136)

For the other workers, the reduction of the wage levels did not necessarily lead to the minimization of the intensity of work. Table 5.5 outlines the decrease in daily wages for mill workers between the period 1884-1889 in the province of Ontario. The number of days of employment enjoyed by the mill worker per year decreased between 1884-1889 but the number of hours worked per week fluctuated. Referring to Table 5.5, we should call attention to the decreasing trend in the amount of wages obtained by the worker from his work between 1884-1889. In certain times, such as between 1887-1889, the average mill worker's earnings from his job would not have been sufficient to meet the cost of living if earning contributions from children and wife were not included. As well, total income of the mill worker, i.e., including extra earnings plus wife and children contributions, decreased as the period progressed between 1884-1889.

Such a strategy employed by the timber and lumber enterprises to lower production costs by reducing wages without lowering the number of hours of work per day naturally incurred protests from the workers. The Canada Lumberman (August 1888) reported on strikes by lumber workers in the North Shore, the Georgian Bay areas and in the Midland District of Ontario over the number of hours worked per day. The most significant of such outbreaks of antagonistic

Table 5.5
Earnings of Lumber workers in the Province of Ontario
1884-1889 (1900 constant dollars)

	Year	Hours Employed (per week)	Days Employed (per year)	Wages (per day)	Yearly Wages from Occupation	Extra Earnings	Wife and Children Earnings	Total; Earnings	Cost of Living
Culler	1884	72.0	255.0	1.96	500.01	45.25	-	545.26	486.44
	1885	67.7	283.3	1.60	454.87	-	-	454.87	389.79
	1886	63.0	308.0	1.44	444.69	-	-	444.69	354.32
	1887	67.2	209.4	1.46	305.88	14.06	14.84	334.77	358.97
	1888	61.7	181.0	1.47	267.40	70.03	-	337.43	348.57
	1889								
Sawyer	1884	65.0	248.9	1.34	334.85	40.75	6.28	381.86	365.26
	1885	59.8	291.7	1.47	429.60	-	4.95	434.55	375.59
	1886	56.2	262.6	1.64	433.10	6.60	5.13	444.83	389.38
	1887	63.2	218.7	1.35	297.05	3.19	19.48	319.72	309.62
	1888	56.3	240.5	1.44	346.65	28.38	1.90	377.93	371.14
	1889								
Average Mill Worker	1884	62.8	259.9	1.50	390.43	15.27	9.34	415.04	340.10
	1885	64.5	277.2	1.55	428.25	13.29	29.96	471.50	391.40
	1886	60.7	279.7	1.53	429.68	11.20	17.23	458.13	395.30
	1887	67.3	197.1	1.52	300.06	14.05	13.97	328.09	346.55
	1888	58.0	239.9	1.36	327.08	17.50	.95	344.58	335.28
	1889	64.3	211.2	1.37	289.36	21.40	12.66	322.54	322.60

(Source: Chew, 1983:299)

relations between employers and workers occurred towards the end of the 19th century in Central Canada. A strike began in 1891 by lumber mill workers working in the Ottawa valley. As we have noted above, the wages of lumber mill workers for the Province of Ontario had decreased from 1884-1889. Prior to the strike date, the economic conditions of the mill workers in the Ottawa valley were in a very depressive state. The Canada Lumberman, in September 1890, reported on the curtailing of credit to mill workers in the Ottawa valley by retail merchants in anticipation of a further slump in the lumber trade. Within such a depressive economic milieu - keeping in mind that the mill worker's earnings from his job would not have been sufficient without the other contributions from his family - it is not too difficult to understand the reasons behind the strike by the mill workers in 1891 at the Chaudière.

The strike started on September 12th, 1891, and ended on November 1st, 1891 involving 2400 persons working for nine timber and lumber companies of which the larger ones were J.R. Booth, Bronson and Weston, Perley and Pattee, and E.B. Eddy (Annual Report Bureau of Industries, 1892: 45). Work stoppage occurred over a reduction in wages of 50 cents per week, non-observance of the ten-hour work day and the intensity of work (Annual Report Bureau of Industries, 1892:34).

"It originated as follows: some men working on one of the mill platforms asked to have the reduction of 50 cents per week returned to them, but got no satisfaction from either foreman or mill owner. After repeated efforts to secure this, on the claim that the firm was putting more work on them than they could stand - there being three less men than had formerly performed the same work - they decided that if they did not get it back on Monday, September 11th, 1891, they would 'cease work'."

The strikers were on the whole unorganized, as the local union for lumber and mill workers, the Chaudière Assembly #2966, Knights of Labour, was only formed the year before on November 20th, 1890 (Annual Report Bureau of Industries, 1892:12). The initial membership was 35 in 1890, and it rose to 225 by 1891. When the workers struck in 1891, according to McKenna (1972), they did not receive the sanction of the Knights of Labour. The reason being that six months notice was required before a strike could be sanctioned, and as mill operations would cease in six months, there was little to be accomplished by the workers. However, support was given by the Knights of Labour after the strike started (McKenna, 1972:186).

All efforts to mediate the strike initially were unavailing. According to the Bureau of Industries (1892:34) "the mill owners refused arbitration and threatened to close up the mills for the season". In fact, a compromise was offered by the striking workers who proposed that a quarter of an hour be taken off their average working hours of eleven and one-half hours, and the fifty cents reduction in

their wages be nullified. This was met with a non-response from the mill owners. However, work at some of the mills continued when the Mayor of Hull, E.B. Eddy (a mill owner) requested the Government to call in the Militia. The presence of the Militia enabled some of the timber and lumber firms to continue limited operations. Three weeks later, strike breakers from outside the Ottawa area were hired to engage in shipping the lumber stacked in the yards of the mills. The workers' attempts to stop operations were met with force by the Ottawa police. As McKenna (1972:205) concluded, the position of the workers grew weaker when shipping of lumber resumed. However, the smaller timber and lumber firms, such as Mason and Company, complied with the workers' request while the larger ones, such as Perley and Pattee, Bronson and Weston and J.R. Booth, locked the strikers out (Annual Report Bureau of Industries, 1892:34). As shipping resumed, the strikers' position continued to weaken. By the fourth week, the men's demands were not met but operations continued at the lumber yards with the Ottawa police maintaining civil obedience. At the end, the strike crumbled with the mill workers gaining back the fifty cents increase per week in wages that was secured in 1890 prior to the strike. The demand for a shorter work-day (10 hours) was granted by the smaller timber firms whereas the larger ones such as Perley and Pattee, Bronson and Weston, and

J.R. Booth maintained the 11½ hours work-day (Canada Lumberman, November 1891). Table 5.6 outlines the settlement between the striking workers and the firms. According to the Annual Report of the Bureau of Industries (1892:37) the loss incurred by the timber and lumber firms as a result of the strike was about \$350,000 while the workers suffered a total loss in wages of approximately \$75,000. The demand for a shorter work-day (10 hours) was not attained until 1895 for those workers working in the larger companies.

This bitter and long strike by the mill workers that lasted for five weeks was probably "the largest strike that occurred in Canada up to that time" (McKenna, 1972:186). With the assistance of the Militia and the police, the operations of the timber firms were not impeded completely. Furthermore, during the period of the strike, the lumber trade was not in a boom stage which meant that it was not crucial for the companies to have increased production. This further enabled the timber and lumber enterprises to withstand such disturbances in their operations without suffering severe losses in profits or market monopoly.

The outcome of the strike reveals some interesting aspects of the dynamics of how capitalist enterprises can react to labour demands during a downturn. It seems that capitalist enterprises do not necessarily have to capitulate or arbitrate with workers during a strike if their circuits

Table 5.6
 Mill Workers' Settlement with Timber and Lumber Firms.
 Following the Chaudière Strike of 1891

	Name of Firm	Work hours/day Before Strike	Work hours/day After Strike	Wages Before Strike \$	Wages After Strike \$
1.	Mason	11	10	6.50-7.00	6.50-7.50
2.	Bronson and Weston	11½	11½	6.50-7.50	7.00-8.00
3.	J.R. Booth	11½	11½	6.50-7.50	7.00-8.00
4.	Hurdsman	11½	11½	6.50-7.50	7.00-8.00
5.	Pierce	11	10	6.50-7.50	7.00-7.50
6.	Shepherd	11	10	6.50-7.50	7.50-8.00
7.	Ex. Lumber Co.	11	10	7.00-7.50	7.50-8.00
8.	Perley & Pattee	11½	11½	6.50-7.50	7.00-8.00

(Source: Canada Lumberman, December 1891)

of capital are not completely disrupted. And especially during a downturn when it is not important for capitalist enterprises to have increased production, the disruptions of the production process by the striking workers - provided that there is no interruption in the circuit of capital - do not seriously affect the firms' survival. Such actions on the part of the capitalist enterprise can only be sustained provided that the "repressive" forces of the State¹³ are available to maintain "civil obedience" and if firms are coordinated towards rejecting the demands of labour. In fact, such a struggle by labour might in the end foster the interests of the capitalist enterprises. The setbacks suffered by labour on such occasions will provide a disciplined work force for the ensuing upswing in the capitalist world-economy.¹⁴

¹³ Martin Robin (1968:11) has commented that early labour law in Canada and elsewhere "was assumed to be at the service of the employers and was called into service for various offences: breaches of contract, trade union organization, rioting".

¹⁴ According to Wallerstein (1979(a)), the harsh disciplining of the labour force inflicts on labour the scars of defeat which it bears into the expansionary phase that ensues. Bryan Palmer (1983:94) has indicated that the depression of the 1870s has been costly to labour: "The price exacted by the depression of the 1870s cannot yet be understood fully, for basic data (such as the extent of unemployment) is lacking. But it is known that labour suffered greatly and that employers used the economic depression to attempt to destroy powerful unionized adversaries".

Politics

By the end of the 1880s, apart from suffering a slump in sales which required the timber companies to undertake certain steps such as wage reductions to cut production costs, these companies faced as well the growing depletion of suitable timber for production. The situation is described vividly by the Canada Lumberman in 1890: "the supply of timber in the Ottawa region is becoming rapidly smaller by year It is the Pacific slope that our lumbermen will, in the future, have to look for an inexhaustible field for their work". The arrival of this grave condition was a consequence of a century of intensive exploitation of the natural resources of the country. Even with the depressive conditions between 1873-1896, and cutbacks in production during certain periods, acquisition of timber limits for conducting lumber operations continued unabated, and in fact increased until 1886. For example, in 1867, we find in the province of Ontario, 6,155 acres of timber land under license. By 1877, the area had grown to 16,133 square miles and continued to increase to 18,486 square miles by 1886. The zealous attempt to ensure a supply of timber led the timber and lumber firms to acquire the timber limits. But such intensive and exploitative use of nature reached its limits by the end of the 19th century. Aware of the impending danger of decreasing supply, the timber and lumber

firms, led by the owner of Bronson and Weston Company, proceeded to lobby the provincial state for conservation. In 1883, they were successful in securing a large timber reserve in northern Quebec (Gillis, 1972:19). Furthermore, they were able to convince the Ontario Government to enforce fire regulations in regard to prevention of forest fires which had plagued their operations. These regulations entailed the Government requesting the timber and lumber firms to nominate fire rangers for the limits they wanted protection.

In this respect, the part played by the state in the accumulation processes of the timber and lumber enterprises has to be considered. It became even more important in the depressive period between 1873-1896. During such occasions, the erection of tariff barriers by the state - a consequence of class interests and the state's role in maintaining the overall accumulation processes - became the norm. In such situations, the owners of timber and lumber operations quartered in separate nation-states proceeded to lobby the respective state legislatures for tariff protection in order to ensure their accumulation processes could continue and survive during the period of depression. We find such maneuvers by the owners of the timber and lumber operations domiciling in the United States and Canada. Between the years of 1870-1896, tariff barriers were being erected and rescinded in both the United States and Canada, a conse-

quence of the different lumber interests located within the national borders of the two countries. Starting in 1872, we find wood produced in Canada competing in the north-eastern United States with lumber manufactured in Michigan, Wisconsin, and Minnesota. Because of this and the marked slowdown in sales, a specific tariff of \$2. per thousand feet was imposed on imported pine sawn lumber by the United States. Such imposition of a tariff barrier by the United States affected the operations of the timber and lumber firms in Canada. This is substantiated by William Perley (owner of Perley and Pattee) who, when asked by the Select Committee on the Current Depression of the Canadian House of Commons (1876) whether the duty imposed by the United States was hurting his operations, replied: "Yes, we should stand an equal chance if it were not for the duties".

There is evidence that efforts were made by the timber and lumber firms in Canada to lobby the United States Congress for withdrawal of the tariff imposed on foreign imported lumber. In the business correspondence of Bronson and Weston, we find the company receiving information and letters in 1874 from the Planning Mill Association of the United States requesting that payment be made to the lobbyists working to remove the imposed tariff (PAC, Bronson Company, MG 28 III 26, Vol. 716). However, the lobbying was ineffective at that time and no political action resulted. But the constant monitoring of movements in the United

States Congress to lower or increase the tariff on imported lumber continued throughout the period of 1870s to 1880s. This is displayed in the business records of Gilmour and Company where we discover on June 1886, a letter from P.W. Cullinan (an attorney in the United States) informing the firm of a new move in the United States Congress to lower the tariff on imported lumber: "there is a fresh movement in Congress on tariff matters, which at this writing looks very much like success. The measure is a modification of the bill I sent you, and includes Lumber in the "rough"". (PAC, Gilmour and Hughson, MG 28 III 6, Vol. 121).

While this was occurring, the lumber interests in Canada were experiencing competition from lumbermen based in the United States who were making investments in north-western Ontario. These companies were cutting logs and towing them across Lake Superior to Michigan for sawing. Because of this, the timber and lumber interests in Canada lobbied the Dominion Government over the unfair advantage which their products had to compete with in the United States because of the American tariff and lower American production costs (Canada Lumberman, 1886). The Canadian Government acted by increasing the export duty on saw logs to \$2 per thousand feet in 1886. Later on in the same year, another dollar was added. This further increase alarmed the timber and lumber interests in Canada as they felt that the United States Congress, prompted by lumber interests in

America, might retaliate with higher tariffs on Canadian sawn lumber. From the Canada Lumberman (1889), we learn that a delegation was sent to meet the Prime Minister, Sir John A. MacDonald, putting forth the worries of the industry and asking that the levying of the additional duty be rescinded.

But such fears were unfounded as by this time the lumber mills in Michigan, especially in the Saginaw Valley, were running out of supplies of logs as a result of the extensive operations in the 1870's to 1880's (Defebaugh, 1906). These mills represented heavy investments of capital by Michigan lumber interests and the export tax placed on logs by Canada prevented this fraction of the lumber mill owners to pursue further operations in Canada. It was to Defebaugh (1906:446): "desirable, from the standpoint of American saw mill owners whose timber was nearly or quite exhausted, that Canada be induced to rescind her restrictions on log export". Thus, the opportunity emerged on both sides with the McKinley Bill of 1890. The new tariffs on wood entering the United States were agreed upon between Sir John A. MacDonald and the United States Secretary of State specifying that Canada would remove the duty on logs exported and the United States would lower the duty on sawn lumber from \$2 to \$1. In this way, the interests of the owners of timber and lumber firms quartered in Canada, as well as those in the United States, were satisfied.

However, with this removal of duty on foreign sawn lumber and its complete removal in 1894 by the United States, timber and lumber interests involved in producing pine sawn lumber in the American south and north-west were incensed. The report of the Southern Lumberman of Nashville, Tennessee, brings this to light: "on behalf and in the interest of Canadian lumber manufacturers, it is quite natural that our Toronto lumber trade contemporary should commend President Cleveland in "the resolute stand taken" by him in support of free Canadian lumber, but lumbermen on this side of the lakes would like to know how many electoral votes in the province of Ontario for a United States President warrants such partiality on the part of the present administration" (quoted in Canada Lumberman, 1894).

Despite this, Canadian wood entered United States markets tax-free and thus generated severe competition for producers of pine, especially those in the southern United States. The condition grew worse with the fall of prices which led the lumber mill owners in the southern and north-western United States to agitate again for a reintroduction of tariffs for sawn lumber (Defebaugh, 1906). In 1897, we find the Dingley Tariff being imposed whereby \$2 was placed on foreign lumber. In the Dingley Tariff, there was as well a reenactment of a retaliatory clause present in the McKinley tariff of 1890, in which a duty of 25% *ad valorem* would be imposed on the wood of any foreign country which placed

an export tax on logs shipped to the United States. The Government of Canada was thus prevented from acting even when pressured by the timber and lumber interests in Canada. But what the Ontario Government could and did impose was a law forbidding the export of logs cut in Ontario after April 1st, 1898 (Defebaugh, 1906). Therefore, what we may discern from these chess board maneuverings by the respective nation-states is that the raising and lowering of tariffs were a consequence both of the lobbying from certain fractions of the capitalist class located within these nation-states to ensure their reproduction, and the states' active involvement in the valorisation and accumulation processes during a downturn in the capitalist world-economy.¹⁵

¹⁵ Besides the imposition of specific tariffs to timber and lumber products during this period, we also witness the implementation of the National Policy tariffs by the Government of Canada in 1879. Commentaries such as those of Williams (1983), Bliss (1974), Forster (1981), and Craven and Traves (1979) to name a few, have outlined the class interests behind the imposition of these tariffs. As these tariffs were wide-ranging and covered almost all products imported into Canada at that time (duties on semi-finished goods and industrial material ranged from 10 to 20 percent, fully manufactured industrial equipment and machinery were levied at 25 percent, and finished goods were at 30 percent), they had the effect of increasing production costs of the timber and lumber firms, as these firms continued to utilize imported products for their operations. For example, chains which were admitted free of duty had a 5 percent levy imposed, and beans had levies of 10 cents and 15 cents per bushel imposed on their importation. Such concern in the increase of operating costs was raised in the Canada Lumberman (September 1883) where we find the following statements:

(footnote 15 continued from previous page)

"..... that while all other branches of industrial establishments and interests in Canada have received the thoughtful consideration, and the fostering and quickening influence of the Government through the tariff, the lumbering industry has never received any material benefit more than that which it received under the tariff of 1878.

Under the present tariff, everything used and consumed in the mills, and in the forest, necessary to the prosecution of this most important Canadian industry have increased in price, thereby causing its products to cost more when ready for delivery, and at the places of shipment, than when under the old tariff".

Clearly therefore, the imposition of the tariffs by the Government of Canada were inimical to the interests of timber and lumber enterprises operating in Canada during this period. Can it be then that this fraction of manufacturers was "side-stepped" in favour of other groups of merchants and industrialists, or the general interests of capital? Ben Forster (1981:473-4) writing on the National Policy Tariffs indicated that because the lumbering industry had sided with the Liberal Party, the Conservative Government which introduced the tariffs was not that keen in accommodating this fraction. Furthermore, according to him, the Government at this stage was only interested in keeping the duties low since the industry was export oriented.

Furthermore, our historical examination of the documents shows that the tariffs were not affecting severely the operations of the timber and lumber firms, as by this time, a domestic market had been developed to cushion some of the loss in sales in other parts of the world-economy. For example, the Canada Lumberman (1885), cited instances where lumber (one million feet) produced in Canada was used in the manufacture of reapers, mowers, self-binding harvesters and carriages in Toronto. Later in the century (1888), W.G. Perley of the firm Perley and Pattee, commented on the increase in domestic consumption of timber and lumber produced in Canada. The case of Montreal was cited by Perley where in 1887, the city consumed almost 20% of the lumber produced by the Mills in the Ottawa valley. In that city, he stated, the estimated local consumption for 1880 was from 45,000,000 to 50,000,000 feet while in 1887 it ran up to 120,000,000 feet (Canada Lumberman, May 1888).

Diversification

Further to these tactics to ensure that their circulation of capital continued uninterrupted, the depressive business environment of the late 19th century forced the timber and lumber firms to diversify their holdings in order to ensure their further survival through the slump. We find the Bronson and Weston Company, as well as the Gilmour and Company (to a lesser extent), venturing into other business activities outside the arena of lumber production by the late 1880s. The direction of diversification was towards wood byproducts, public utilities, chemicals, mining and transportation. In the case of the Bronson and Weston Company, several street railway enterprises in Ottawa namely, the Ottawa Electric Street Railway Company and the Ottawa City Passenger Railway Company, were bought and merged into a single firm, the Ottawa Electric Railway Company. This was also the case for electric power. Along with Perley and Pattee, Gilmour and Company, Hurdman and Company, Bronson and Weston bought up existing utility companies in the Ottawa valley namely, the Ottawa Electric Light Company, the Chaudière Electric Light and Power Company, and the Standard Electric Light Company, and merged them into a single operation, the Ottawa Electric Company. Profits from lumber operations of the Bronson and Weston Company were reinvested into such areas. In addition, Bronson and Weston started

lumber operations of its holdings (3500 acres bought in 1874) in Heimboldt county, California in 1892. Besides moving into transportation and utilities, the Bronson Company also expanded into match-making, chemical, furniture manufacturing, and mining operations. However, in comparison, diversification was less for the branches of Pollok, Gilmour and Company, except for their investments in utilities concerns. By the 1890s the company was experiencing severe financial difficulties¹⁶ and had to seek fresh funds. In 1891, a timber and lumber mill owner from the United States bought up a portion of the company and it was renamed Gilmour and Hughson.¹⁷

¹⁶ The severe financial crisis experienced by the firm must be considered in relation to large amounts (£100,000) of funds transferred between 1886-1889 to England to the trust fund of one of its owners.

¹⁷ As the 20th century arrived, the two companies managed to continue their timber and lumber operations. Efforts to maintain the production levels in Central Canada were not very successful. According to Hughson (1964:46), the firm of Gilmour and Hughson was sold to the Montreal firm Riordon and Company, and on February 1, 1921, the properties of Gilmour and Hughson were again sold to a subsidiary of the International Paper Company of the United States, the Canadian International Paper Company at a value of \$3,016,777.

The Bronson Company diversified into other activities, and after 1900, the Company's activities in the timber and lumber sector were confined to ground pulp and to their mills in the redwood country of California (Ottawa History, Vol. 5:84-85). Lands of the Bronson Company were also donated to the Government of Canada in the 1960s.

5.4 CONCLUSION.

Considering these changes in the structure and activities of timber and lumber enterprises during a period of depressive/stagnated conditions, one can suggest that a downturn in the world-economy not only engenders conditions of acute competition and elimination of weaker and smaller capitalist firms but as well forces the surviving capitalist firms to diversify, reorganize and reconstitute their business operations - a feature quite common for the late 19th century depression. Furthermore, during such times, the imposition of tariff policies by the state, and the disciplining of the labour force will facilitate the accumulation process in the next upturn phase. Thus, these organizational and structural changes provide the conditions for renewed expansion and growth of capitalist enterprises in the ensuing upswing of the capitalist world-economy.¹⁸

¹⁸ This conclusion, I believe parallels the works of Albert Bergesen (1981) and David Gordon (1980). In a more general way, such trends are discussed in the works of Immanuel Wallerstein (see for ex. Wallerstein, 1980(d), 1984(c)).

CHAPTER 6

REFLECTIONS

As we reach the end of this journey, it is appropriate to reflect upon the patterns and issues that have emerged from this study. We started with the assumption that capitalist development is a world-wide, historical process, and posited a theoretically oriented approach of a capitalist world-economy with its certain structures and dynamics to guide our understanding of the requirements, possibilities and obstacles of capital accumulation in the 19th century.¹ Analysis of the dynamics of capital accumulation was centred on a unit of capital, the capitalist firm. We particularly focused on the interlinked productive processes of the world-economy, by tracing the operations of firms producing "capital goods" in a peripheral area for core consumption. The nature and extent of the operations of the firms have revealed certain patterns and tendencies that offers an opportunity to reflect on the current understanding of capitalist production and accumulation in the making of the modern world as well as social change and economic transformations in Canada.

¹ Capital accumulation in this context refers to circuits of individual capital that Marx put forth in the second volume of Capital.

In the pages to come, we begin with a reassessment of contemporary understood concepts and historical processes of capitalist production and accumulation, and its politics. Our attention then turns to a discussion on how the assembled information of this study adds to our understanding of social change and economic transformations in Canada. Finally, we conclude with some reflections on how the overall tendencies delineated in this study add to our understanding of capitalist accumulation on a world scale.

6.1 ON CONCEPTS AND HISTORICAL PROCESSES

6.1.1 Capitalist Enterprises' Transnational Activities as a Constant

It is clear from the examination of the business activities of the timber and lumber firms that their operations occur on a **transnational** basis. We note of inputs of materials necessary for production processes traversing state boundaries **over the course of the 19th century**. This underlines a cross-cutting of chains of economic activities that occur **over time and over state frontiers**. There is, therefore, a lack of coincidence between economic processes and national boundaries. Such a pattern of business operations suggests the **internationalized** character of capitalist accumulation. The fact that this pattern occurred, in our case as early as the late 18th century, does add further to

Wallerstein's thesis (1980(c):20, 1983) that the circuits of capital of individual capitalist firms are transnational in nature and occur at any politico-economic conjuncture of the world-economy.

"Individual capitalist firms are juridically quartered in particular nation states. However, the circuit of their capital in all of its moments - the procurement of the means of production, the transformation of the materials into commodities, the distribution and sale of these commodities, and the investment of the profit as accumulated capital - is accomplished in whatever part of the world-economy is most profitable, given any politico-economic conjuncture".

This means that the transnational nature of the circuits of capital of capitalist enterprises is a constant feature of capitalism, rather than a recent innovation depictive of a specific period, such as that of the 20th century. No doubt, such a view is in contradistinction to other positions of the nature of circuits of capital of enterprises - such as those of Hymer's (1979) and Sunkel (1973) - that suggests that transnational activities are a feature of the 20th century. When this latter position is grafted onto studies for understanding and explaining the patterns and changes in peripheral and semiperipheral areas of the 20th century, it tends to give the impression that these changes are unique features depictive of the epoch - a consequence of 20th century multinational activities. *Per contra*, if we assume the position of the constancy of the transnational activities of capitalist firms, the patterns and changes are features of capitalism as a mode of production. In other words, the

patterns and changes are not unique but rather representative of the features of the historical accumulation of capital on a world scale. We find, therefore, similarities in the mode of business operations between the 19th century timber and lumber firms and the 20th century transnationals, such as the vertical integration of production activities, and the utilization of local money-capital sources for financing following the start-up of operations.

6.1.2 Capitalist Productive Relations

The different forms of labour utilized by the timber and lumber firms for their production operations does undermine the orthodox understanding and definition of capitalist productive relations. The continued utilization of 'jobbers' by the transnational timber and lumber firms throughout the course of the 19th century suggests that besides wage labour, this form of labour relation to 'capital' is also depictive of capitalist productive relations. Hence, capitalist productive relations cannot be distinguished by just wage labour as a characteristic description (as some would have it), but rather by a set of different forms of labour relations to 'capital'. Such a position provides an opportunity to move beyond the need to procrastinate in our consideration of whether an observed form of productive relations that is not depicted by wage labour is capitalistic

or not. It enables us the opportunity to assess and analyse the dynamics of capitalism's multifarious character and to understand its dynamics whereby the search for incessant profits and accumulation on the world scale is its driving force.

The use of different forms of labour by the timber and lumber firms further indicates that capitalist firms utilize whatever forms of labour are most convenient and profitable for their business operations. Our findings in this case are by no means unique. Others such as Frobél et al (1977, 1980(a)), Frobél (1980(b)), and Wallerstein (1979 (a)) have commented on this feature of 'capital'. It is clear from history that 'capital' uses these varying forms as it comes into contact with them and adapts them to meet its requirements depending on the resistance or collaboration of the people concerned. The rate of surplus value creation therefore is dependent on the reproductive costs in the zone of the world-economy in which production is located. Such utilization of different forms of labour relations provides opportunities also for 'capital' during crisis moments to shift production locations and to seek cheaper sources of labour for its own reproduction.

6.1.3 Core-Periphery Relations

One of the tenets of dependency theory as outlined

by Frank (1969:9-10) is that satellites (periphery or semi-periphery) experienced the greatest growth during periods of least contact with the metropolises (core), such as during occasions of global war or economic depression. This hypothesis was generated to counter the commonly accepted notion that the satellites achieved their strongest growth during periods of active relations with the metropolises. It provided the opportunity therefore for *dependentistas* to assert that the underdevelopment of the periphery is a consequence of the external relations with the developed core. Such a position, though inspiring in terms of providing policy guidelines for delinking from the capitalist world-economy or for the establishment of nationalistic industrialization and trade policies, does not correlate with our empirical findings. The severe economic disturbances experienced in the periphery during periods of global economic depression and at a lower level (in our case) experienced by the timber and lumber firms clearly undermines Frank's hypothesis.² The current crisis in the world-economy provides further empirical evidence that this hypothesis should be re-examined. At

² In 1981, Frank (1981) seemed to suggest that dependency theory as it was developed in the 1960s was no longer an adequate theory to understand capitalist development. In an earlier publication, Frank (1980(a):10) was even blunter in stating that dependency theory was invalid and inapplicable.

the theoretical conceptual level, it is not difficult to see why this cannot be the case. For if one posits an integrated historical system (the capitalist world-economy) with its interrelated parts that are in some sense systematic, any disturbance in one part of the system is translated to other parts of the system. Thus, the regions of this world-system are functionally interlinked to provide for capital accumulation on the world scale. What this means is that if completion of the circuit of capital is interrupted in the core areas, the peripheral region's productive processes will be affected since it is assumed that peripheral processes support those of the core and vice versa.

However, it does not mean that opportunities will not present themselves for certain parts of the semiperipheral and peripheral regions. Given the right conditions in terms of the changing needs of the core, and the correct political will, states in these regions have the opportunity to take advantage of these global circumstances to improve their standings within the capitalist world-economy.³ The history of the world-economy exhibits such instances.

6.1.4 The State and Capital Accumulation

Besides the transnational character of the circuits

³ See for ex. Wallerstein (1971, 1979(a):95-118) where he discusses opportunities for mobility of states in the capitalist world-economy.

of capital of the timber and lumber companies and the utilization of different forms of labour in the production processes, the significant part played by the state in the circuit of capital accumulation of these firms needs to be highlighted. By no means are our findings and discussion of state activities in capitalist accumulation unique. The functions of the state, have historically been and continues to be the enhancement and guaranteeing of capitalist accumulation. Peter Kriedte (1983:16), commenting on state activities between the 16th to the 18th centuries, has elaborated on the extensive actions and powers available to and used by the state to reproduce a capitalist environment.

"The state alone, owing to its monopoly of violence which it claimed and slowly succeeded in asserting, was in a position to impose wage labour conditions upon the production sphere, institutionally to guarantee the freedom of exchange of goods in the commercial sphere and, finally to formalize the legal framework without which the nascent capitalist society would not have been able to exist. Also, by expanding the transport infrastructure, it promoted the general conditions required in an economy which produced goods for the market".

The view that the state creates and supports a capitalist environment is also shared by Ivan Berend and Gyorgy Ranki (1982) in their discussion of the state in the European periphery of the world-economy between 1790-1814. For them, such state functions are the most important aspects of state activities. In our case, the function of the state in the production process and the final realization phase of the business activities of the timber and lumber enterprises

underscores the importance of the state's role in capitalist accumulation. This state function has also been confirmed by Tom Naylor (1981:43) writing on the Canadian State in the 19th century: "a second major function of the federal state in nineteenth century Canada was to create a stable environment for capital accumulation.....". This means that the state is not only a form alongside other forms in capitalist society, but it is a "necessary form in the reproduction of the society itself" (Blanke et al, 1978:119). Hence, the state's (historical) nature and function is associated with the process of capitalist production and reproduction with its contradictory class struggles.

Such a view of the historical functions of the state and the continuous crucial role it plays in the reproduction and expansion of capitalist accumulation does not quite coincide with other theses on the theories of the state in which there is a periodization of the role of the state, such as the minimalist liberal state of competitive capitalism, and the expanded interventionist state of monopoly capitalism. For us, these theorisations are more the result of statements made in the absence of a historical examination of state activities throughout the history of the development of capitalism.

Clearly, therefore, the theoretical emphases of the State Derivation theorists (see Holloway and Picciotto,

1977, 1978), Claus Offe (1984) and Robin Murray (1971, 1975) on understanding the role and function of the state to the laws and motion of capital in relation to the historical developmental processes of capital accumulation, and to the fact that the state is a form alongside other forms in the reproduction of capitalism, are important. Too often, we witness analyses of state activities in relation to state policies and class relations in the absence of considering the dynamics of the circuit of capital accumulation. The push by structural Marxists such as Althusser (1970) and Poulantzas (1973, 1975) to emphasize the specificity of considering the political has led to such analyses which tend to account for state activities *in absentia* of accumulation dynamics. Furthermore, we also find studies emphasizing the necessity of placing the state as an important and to a certain extent dominant player because of the neglect of past Marxist analyses in attributing the importance of the state in the overall reproduction of capitalism.⁴ For example the works of Theda Skocpol (1979, 1985(b)) belong to this genre. Such works are invaluable for they illuminate an

⁴ The thrust of the recent publication by Peter Evans, Dietrich Rueschemeyer and Theda Skocpol (1985) of "bringing the State back in" to social science analyses is an exemplar of this trend. There are articles in this book which place some stress on capitalist accumulation processes, however the overall tone of the book tends to stress the predominance of the state.

area that is rather dark in the past, but, unfortunately, they only explain state activities and policies in relation to class constellations and independent state actions (policies) rather than trying to account as well for state activities in relation to the accumulation process that is the kernel of capitalism.

Besides this historical role of the state in the reproduction and expansion of capitalist accumulation, the aspect of the relations between the state and the capitalist class needs to be addressed. These relations have been discussed vigorously in the Miliband and Poulantzas debate which will not be evoked again. Clearly, as Giddens (1981: 218-219) has stated, the protagonists and their supporters in this debate "both have right on their side". In our case, we have tried to show on one hand, the role and functions of the state in relation to the circuits of capital accumulation of the timber and lumber enterprises, thus underlining the structural characteristics of the state that makes it capitalistic in nature. On the other hand, we have also traced empirically the relations between the state and a 'capitalist fraction' in an attempt to underscore the instrumental relations - or partnership as Miliband (1983: 72) has coined it - of the state with the capitalist class. We are thus led to agree with Wallerstein (1980(a)) that state activities reflect the need of class forces, and also

with a state having a life of its own (autonomy).

The empirical evidence presented has shown the instrumental relations between the state and a fraction of the capitalist class and as well, the state acting as a capitalist state. Clearly, in this case, the question of the autonomy of the state that is of importance to Poulantzas (1969, 1973, 1978), Block (1977), Skocpol (1980, 1985 (a)) and others can only be understood in relation to the balance of class forces and its location in the interstate system within the hierarchical structure of the world-economy. In our historical context, the Canadian State possessed peripheral jurisdictional power locked into an interstate system with Great Britain as the hegemon. This conception of the relations of the state with the capitalist class is also commensurate in certain ways with others such as Tom Naylor's (1981) and Daniel Drache's (1983) historical accounts of the state in Canadian political economy. In Naylor's words (1981:43), the function of the state was to "provide a forum for the scramble for the division of spoils by competing factions of businessmen", and Drache (1983:37) has put it in starker terms, "the state was largely an instrument functioning directly and indirectly at the *behest* of the dominant economic elites". It is clear, therefore, that for a fuller understanding of the relations between the state and the capitalist class, it is necessary to examine

these relations in an empirical and historical context.

One of the other functions of the state which needs highlighting is its role in socially controlling class conflict. The importance of this activity is reflected in our empirical examination whereby the circuit of capital accumulation was protected and restored by the state during an instance when this circuit was threatened (strike) by the working class. It is important to underscore this function and we agree with Theda Skocpol (1985(a)) on this. The disciplining of the labour force becomes an important feature of inflicting on it wounds that will provide a subservient work force for capitalist production. Especially during the period of an economic crisis, such actions provide a disciplined work force for the subsequent growth phase of the world-economy (Wallerstein 1979(a)).

From our discussion, it is clear that along with Martin Carnoy (1984), Bob Jessop (1982), Peter Evans et al (1985), and Robert Alford and Roger Friedland (1985), we have taken the position that aspects of the state's functions cannot be explained adequately (a universal theory of the state) by any single theoretical perspective, be it Marxist or Pluralist. Rather, we believe that the proposals of Wallerstein's (1980(a)), Miliband's (1983), Offe's (1975 (a), 1975(b)), and the State Derivation theorists' (Holloway and Picciotto, 1978) on state activities and functions, such

as the state reflecting the needs of class forces and its role in maintaining capital accumulation, provide elements for understanding the multifarious character of state activities. As well, it is important to realize that state activities should be theorized and explained within the processes of the circuit of capital accumulation.

6.2 THE WORLD-SYSTEM AND CANADIAN POLITICAL ECONOMY

In this study, we have traced the circuits of capital of transnational timber and lumber enterprises. As a commodity chain, a large proportion of the operations of these firms (the phases of procurement and productive-consumption) occurred in an area of the world-economy known as Canada. Such a penetration by timber and lumber enterprises in the political economy of Canada would mean that certain economic processes were engendered and transformed. The continued operations of these firms in Canada would also shape the dynamics of the developmental processes of Canada. Thus, the historical processes and occurrences that we have discussed will bear some impact on our understanding of Canadian socio-economic transformations.⁵

⁵ Understanding of socio-economic transformations in Canada has been guided by several theories (see my study, State, Economy and Class in the Development of Canada: A Propaedeutic Exercise Toward an Understanding of the Socio-Economic Development of Canada Utilizing a World Accumulation Approach, Department of Sociology,

6.2.1 'Capital' Migration and Penetration

Assuming the dynamics of the capitalist world-economy with its core-periphery relations, we have examined the exigencies, opportunities and obstacles that faced the timber and lumber firms as they operated in the world-system.⁵ It is clear from this analysis that the capitalist timber and lumber firms shifted their production activities from one region to another following transformations in the world-economy that impeded the reproduction of their operations. In other words, capitalist firms would shift their operations to regions of the world-economy that provide the most conducive conditions for capitalist accumulation. In this conjuncture, the shift of operations was to British North America. Even though British North America was

⁵ (continued)
 Carleton University, 1980). Of these theories, the dependency approach gained fashionable popularity in the 1960s and 1970s (for example, the Canadian Review of Sociology and Anthropology (Vol. 17, #3, 1980) published a whole issue dedicated to the analysis of Canadian dependency and underdevelopment). Imported into Canada mainly from the Latin American discussions, this approach was coupled with the work of Harold Innis to explain the dynamics of Canadian socio-economic transformations. With criticisms being mounted at the dependency approach by Marxist scholars in the late 1970s (for ex. Brenner (1977)), the approach has lost some of its lustre and vitality in Canada. The result of this is that there has been an emphasis on utilizing class analysis and other basic tenets of Marxist orthodoxy to understand socio-economic transformations in Canada (for a discussion of the debate and shift see Drache (1983)).

already incorporated in the capitalist world-economy prior to such penetration by the timber and lumber firms, the extensive productive activities of the timber and lumber firms in the political economy of British North America further shaped and transformed the socio-economic processes of this region of the world-economy. The time frame of such penetration was as early as the 19th century. The empirical evidence of the scale of such operations in the extraction of a natural resource to feed the core region of the world-economy and the transfer of the profits back to the core should be underscored. The penetration and continuance of such operations and its occurrence in the 19th century would lead us to agree with Clement (1983:55) that the distortion of the economy of Canada did not begin with the United States branch plants in the 20th century. Furthermore, as our historical examination of the operations of these transnational timber and lumber firms has shown, initial investments for production activities were from sources external to British North America to be replaced in the later parts of the 19th century by indigenous monetary sources. Therefore, besides external portfolio capital investments which have been described by some, such as Clement (1983) and Drache (1983), as depictive of the period, capital for undertaking natural resource extraction is also evident. The latter investments are of the direct

type; and therefore, are similar to investments made by "foreign" corporations in Canada in the 20th century. In light of this, the warning bells sounded by Canadian political economists and sociologists such as Levitt (1970), Clement (1983), Drache (1983), Lumsden (1970), and Watkins (1973) on the debilitating effects of foreign penetration of the Canadian economy in the 1950s and 1960s should be noted. But, we should be alerted to the fact that these bells of warning should ring throughout the history of the development of Canada rather than sounding for a specific period. Therefore, the discussion on the underdevelopment of Canada should not only be limited to just the 20th century as a distinct feature in Canada's history.

Thus, socio-economic transformations in Canada can be better understood historically in relation to the processes and trends of the capitalist world-economy. In spite of the perceived uniqueness of the socio-economic changes in Canada, they are, as one can say, part of the "civilizing" mission of "capital" on a world historical basis.

6.2.2 Canada and the Cycles of the World-Economy

As a historical system, the world-economy exhibits cycles of expansion and stagnation. Some of the characteristics of the stagnation phase have been discussed in the previous chapter. It is clear that during such phases of

stagnation, downturn effects are felt throughout the system because of the linked productive processes existing in the world-economy. Therefore, any region that is incorporated into the world-economy would necessarily experience these conditions. As such, Canada following incorporation (1660-1750) in the world-economy would feel the impact of these cyclic downturns.

In the previous chapter, we have used such a periodization to understand the dynamics of capital accumulation of timber and lumber firms operating in Canada. Such an examination revealed the strategic actions taken by these firms to combat the conditions during a downturn. Inevitably, the actions taken would transform certain socio-economic processes in Canada during the period. Hence, our analysis of the firms' operations within the spatio-temporal setting of Canada also reveals the changes in the political economy of Canada during a downturn. The cyclic nature of such periods of expansion and stagnation offers opportunities to understand the trajectory of capitalist transformations in the world-economy, and thus, Canada. Therefore, the temporal sequencing of the cycles of expansion and stagnation with their associated effects can guide our periodization and understanding of the transformations in the political economy of Canada.

6.3 CONCLUDING REMARKS

This study has analysed the business operations of timber and lumber firms in the capitalist world-economy. We witnessed the migration of these capitalist enterprises from one region of the system to another as a consequence of the transformations of the world-economy at a particular conjuncture. The objective basis of this movement is to maintain and continue the **expansion** of the firms' accumulation processes. The consequence of such a quest, however, is the further deepening of the core-peripheral relations between a region of the world-economy, Canada, with the core areas.

As a commodity chain, the productive operations of the timber and lumber enterprises exhibit vertical integration analogue to the operations of transnational corporations of the 20th century and the chartered companies of the 16th to the 18th centuries. Sourcing for their productive operations was derived mostly from Great Britain and the United States with profits (in the form of 'money-capital') realized from their productive operations being transferred back to the core areas. Hence, the operations of these firms not only show a non-coincidence between economic processes and political boundaries, they also reveal the transfer of 'capital' from the periphery to the core.

In support of the accumulation process of the timber and lumber firms is the state. Whether in British imperial

or Canadian hues, the state maintains and provides the conditions for capitalist accumulation. Through its various actions, the state meets the needs of the valorisation process. State actions permeate all phases of the circuit of capital of the timber and lumber enterprises. To this extent, the politics of accumulation extend from allocative functions to the provision of coercive forces to maintain and impose social order. Thus, the state is a crucial mechanism in the circuit of capital accumulation of the timber and lumber enterprises.

The capitalist world-economy as a historical system exhibits cyclical rhythms of expansion and stagnation - a consequence of the dynamics of capital accumulation. As participants in the world accumulation process, the timber and lumber enterprises we examined were subjected to these modulating rhythms. Various business strategies and measures were tried by these firms during the stagnation of 1873-1896 in order to minimize losses and to maintain market advantage. However, not all the tactics chosen were successful. Diversification was a route taken for survival, though not all the firms survived the storm of stagnation intact. Thus, the phase of stagnation in the world-economy is a period of 'crisis' for the capitalist enterprise, and the strategies they employ determine their survival in the accumulation process of the world-economy.

Our analysis of the timber and lumber firms' operations in Canada has indicated that Canada as a region in the world-economy participated in the linked productive activities of the system. With bountiful natural resources and a supply of labour, Canada provided conducive conditions for capitalist firms to undertake productive activities during a conjuncture when their continued reproduction and expansion in other regions of the world-economy were threatened. Locked into a singular division of labour of the world-economy, the socio-economic processes of Canada expanded and stagnated according to the rhythms of expansion and stagnation of the world-economy. Thus, the pace of socio-economic transformations in Canada is modulated by the processes and trends of the capitalist world-economy.

This study started with a different epistemological position from contemporary understanding of the dynamics of social change and capitalist accumulation. We ventured into the realm of historiography in order to elucidate theoretical concerns and to interpret and understand the circuit of capital accumulation of timber and lumber firms in the world-economy. Clearly, we have not exhausted all the concerns related to the understanding of the circuit of capital of firms operating in the world-economy. What we have tried to do is to map out the contours and patterns of the firm's circuit of capital in a period of the capitalist

world-economy. With this start, it is essential, therefore, that we move forward to examine further the historical patterns of the capitalist firm's operations in the world-economy that have not changed and are not changing; only then will we be able to perceive the evolution and trend of the accumulation of capital on the world scale.

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APPENDIX 1: DEPENDENCY THEORY

Over the past two decades, a large corpus of literature has emerged in the field of social change and development that addresses questions of world inequality and uneven development. Compared to the writings on social change written in the late 1950s and early 1960s, this set of literature rejects completely the perspectives (developmentalist approaches) and solutions offered by theorists of social change and economic development, from Walt Rostow (1960) to Lucien Pye (1962). This corpus of writings is commonly referred to by students in the field of change and modernization as the 'dependency or uneven development' perspective. In the later half of the 1970s, this approach was extended and revised further in the framework of a system of world capitalism. Early features of this dependency perspective can be seen in the work of Paul Baran (1957) and the reports of the United Nations Economic Commission for Latin America (ECLA) which centred around the work of Raul Prebisch (Chilcote, 1974:10)..

Out of this critical interruption, there has emerged over the years extensive studies on underdevelopment from Andre Gündér Frank (1967, 1969, 1972(b)), Theotonio Dos Santos (1970), Fernando Cardoso (1972, 1973, 1977), Celso

Furtado (1971), Johan Galtung (1973), Osvaldo Sunkel (1973), and others. Interest focussing on the studies of underdevelopment was generated through this dependency framework, and since its early formulation, this perspective has been applied to studies of underdevelopment in Africa, Canada, and the Caribbean. Even though this perspective generated widespread support, it is not without its critics. Critical evaluations have come unexpectedly from the left as well as from the right. Two of the most substantive criticisms of the left are from Ernesto Laclau (1971) and Colin Leys (1977). On most occasions, critics of the left have challenged and criticized the dependency approach for its eclectic nature and its lack of adherence to Marx's principles. Simply put, the criticisms suggest that dependency theory does not adhere to Marx's *Weltanschauung*, and thus is deemed inappropriate for a 'correct' analysis of the state of society or solutions for change to occur.¹

It is important to underscore that not all these dependency studies were wholly influenced by Marxist writings for some of them were developed mainly as a rebuttal to

¹ These criticisms from camps within the left were summed up in an article by Gunder Frank, "Dependence is Dead, Long Live Dependence and the Class Struggle". In the same way, Arghiri Emmanuel writing within a dependency approach is severely criticized by Charles Bettelheim for his distorted handling of the Marxist problematic. See the appendix of Unequal Exchange by Emmanuel for this critique.

the developmentalist approach to change as well as an attempt to account for the growing inequality between the developed countries and the Third World. The works of Raul Prebisch (1959, 1976) and Celso Furtado (1971) come under this umbrella.² In spite of these differences among the proponents of dependency theory, this counter perspective to the dominant approach to change does have some common characteristics in terms of the arguments about social change and economic development, although in cases, the solutions for change differ. What is most characteristic of these studies on change and development is the fact that their perspectives are developed from the view of the Third World. These studies challenge the developmentalist's concept of change with its elements of stagism, diffusionism, and dualism by suggesting that these concepts are a consequence of a non-holistic and ahistorical perspective. The *dependentistas* assert that the onus for the lack of development (underdevelopment) in a Third World country cannot be blamed on the later developing society, but that responsibility must be placed historically for its underdevelopment on the contemporary western and former colonial powers. Therefore, the domination of Third World societies has existed

² In fact, Frank (1974:90) distinguishes his approach from that of Prebisch's and Furtado's by suggesting that Prebisch and Furtado belong to the old school of Dependency Theory which is nationalist in orientation.

since very early times, even as far back as the 16th century.

It is also suggested that Third World societies might be originally undeveloped, but never underdeveloped and that the root cause of this can be attributed to the structure of external relations in which these later developing societies are enmeshed. Subsequently, this generates the domination of their economies by the metropolitan centres and the subordination of their social and political growth to the interest of the metropolises. What this leads to is the development of a typical form of class (or national elites), political, and economic structures for a Third World country; though the forms might change for each specific epoch or cultural context. By posing the development of this distorted configuration of social, political and economic structures, the *dependentistas* challenge the dualist thesis present in the developmentalist theory which suggests that in most later developing societies there is the presence of a dual society whereby a modern industrial enclave exists parallel to a traditional backward society. The reason for this uneven development is due either to the lack of progress, communication or traditional feudal practices on the part of the developing nation. What the *dependentistas* argue is that the backwardness and dual society phenomenon is basically caused by the development of these modern

enclaves. That is, the development of these urban centres has been parasitical on the underdevelopment of the hinterland. This thesis, they suggest, can also be applied to the developed nation *vis-à-vis* the developing one, in the sense that the development of the metropolitan nation was made at the cost of the underdevelopment of the peripheral nation. The process of articulating this unequal development is pursued in the forms of unequal trade relationships as well as social-political policies. A classic historical example for this can be seen in the underdevelopment of India (Frank, 1979).

The proposals of the *dependentistas* for the causes of underdevelopment were articulated further within a set of strategies for liberation from underdevelopment. Even though they recognize the fact that each country has to work out its own solutions to liberation consistent with its own particular circumstances, there is common agreement that successful development must proceed on two fronts: a) external change in the structure of the Third World nation's relationships with the imperial metropolitan powers; b) internal changes within the country which are contingent on change in the present ruling class. A fair proportion of the Latin American *dependentistas* (depending on their philosophical leanings) stress for a displacement of the present ruling class or elites. By and large, they advocate a socialist revolution. This is a very clear case for Andre Gunder

Frank who sees this route as the only way out for the under-developed countries. Samir Amin (1974), whose works are on Africa, also strongly supports the displacement of this peripheral ruling class. However, Johan Galtung perceives revolutionary change as only one of several possibilities as he implicitly takes a more optimistic view of elites in the Third World societies as being capable of aggressive nationalism under certain historical conditions.

So far we have outlined in a general manner the themes that are predominant in contemporary discussions of uneven development. We will now examine explicitly these theoretical and empirical works to understand further the complexity of these issues, and start with the structuralist works of Johan Galtung and Raul Prebisch as a point of departure.

THE STRUCTURALIST'S APPROACH TO CHANGE AND UNEQUAL DEVELOPMENT

The works of Johan Galtung (1973) and Raul Prebisch (1976) are the best exemplars of the structuralist approach to social change and unequal development. The structural work of Johan Galtung focusses on explaining how resistant is the gap in world inequality existing between centre nations and peripheral nations to change. This is accounted for by Galtung in a structural theory of imperialism outlining the way an imperialistic structure produces and repro-

duces inequality on a world scale. Associated with this uneven development is a set of dependent economic, cultural, and political relationships which inhibit progress towards closing the gap of world inequality.

In his efforts to outline this structural dominance of a peripheral nation, Galtung outlines a set of relationships that exist between a centre nation and a peripheral nation with each having its own centre and periphery. This relationship is based on an index of harmony and disharmony which, for Galtung, will lead to either peace or violence in the world. The three relationships of harmony and disharmony delineated by Galtung are:

- 1) There is harmony of interest between the centre in the centre nation and the centre in the periphery;
- 2) There is more disharmony of interest within the periphery nation than within the centre nation; and
- 3) There is disharmony of interest between the periphery in the centre and the periphery in the periphery nation.

The measures of disharmony are based on income, standard of living, etc., and disharmony increases when these measures begin to widen between these nations.

For Galtung the above relationships have given rise

to two mechanisms of structural arrangements which have become integrative mechanisms for the imperialist system. There is a vertical interaction process which comprises of relations of unequal exchange and differential benefits between the centre and the peripheral nations. This means that there are different "spin-offs" for the partners. The centre nation profits as it handles the processing of the natural resources as well as the manufactured products. Thus, its economy is stimulated through this unequal distribution of labor. The vertical interaction process is complemented by a feudal interaction structure whereby inequality and dependence is perpetuated among the peripheral nations since their interactions with centre nations, according to Galtung, is structured and limited to transacting with particular centre nations. This feudal arrangement limits the amount of multilateralization that might exist among peripheral nations or between peripheries and other centre nations. Thus, the peripheral nation produces natural resources for the particular centre and buys the commodities of the centre. What this leads to is a monoculture for the periphery.

From this centre-periphery relationship, Galtung distinguishes five sets of ties which can depict the type of relations between centre and peripheral nations: economic, political, military, communication and cultural. Galtung

further argues that the type of relations can change after initial penetration of a peripheral nation. For example, the relation between centre and periphery, could begin as a military relationship and end up as economic and cultural in nature. The intrinsic nature of cultural imperialism, in Galtung's view, is that the cultural values of the centre nation is instilled in the peripheral nation after its encounter with the centre nation. This is a major problem for Galtung as it is more subtle than either military or economic exploitation. But Galtung concedes that imperialism functions best when the five types of relationships in which it might exist are fused into one. In terms of benefits that are accrued, the centre in the centre nations and the centre in the peripheral nations are the ones which stand to benefit the most. To a lesser extent, the periphery in the centre nations will benefit, and this type of system is destructive for the periphery in the peripheral nation.

This division of countries into centre and periphery is made more complex by Galtung's suggestion that there are countries in the world capitalist system which have a 'go-between' status. A 'go-between' nation in this case would be one which mediates between the centre and peripheral nations. These nations would exhibit features which are common to both central and peripheral nations, such as

having a technological development ahead of the periphery but behind the centre nations. They would also be more likely to deal with semi-processed materials rather than finished products of the centre or the raw materials of the periphery. With this set of 'go-between' nations, it would be safe to suggest that the imperialist structure would be made further immune to aggression from the peripheral nations as these 'go-between' nations would cushion as well as act as a reinforcer for the reproduction of imperialism.

Galtung counters this analysis of the structural conditions of inequality and unequal development by offering several suggestions and strategies for overcoming the imperialistic structure. His main focus is on structural changes of the variety such as exchange on more equitable terms in relation to trade patterns, a reduction in the vertical division of labor, and more multilateralization of relations between the periphery and other friendly centre nations. To achieve these policies, Galtung adheres to the prospect of the development of a more aggressive nationalism on the part of peripheral nations as a historical possibility, and places a heavy emphasis on the evolution of this social phenomenon.

It is along a similar vein that Raul Prebisch (1959, 1976) launches his analysis of change *vis-à-vis* the economic sphere of Latin America. In the early 1960's, Prebisch, in

a series of reports to the United Nations Economic Commission for Latin America, suggests that change in South America has been hampered by the unfavourable conditions of international trade. He asserts that Latin American capital has been drained off due to the structural condition of lower prices for its natural resources in relation to its imports of manufactured products.

This deficit in terms of capital outflow from Latin America can be attributed to a set of structural causes occurring in the core countries which Prebisch suggests is hampering the social developmental strategies of Latin America. The main ones are the series of economic as well as social conditions which determine the prices of South America's natural resources along with its imports of manufactured goods. One of these conditions is the inelastic demand of the peripheral countries' raw materials which means that any increase in the productivity on the part of Latin America would lead to a drop in prices of its natural resources. However, the obverse does not occur for the prices of manufactured goods which Latin America imports. This is because there are two primary conditions which maintain the price level of these manufactured products. The first being the elastic demand for the manufactured goods which means that any increase in productivity would be absorbed without any decrease in prices. The second factor

for this relative stability of prices, or even in certain circumstances artificially inflated prices, is the existence in the core countries of trade unions and monopolies whose interests are to maintain respectively high wage levels and profits. As well, Prebisch suggests that the centre nation's dominant position is reinforced by its high technological capability to produce substitutes and synthetics which, in the long run, will lower the demand for the natural resources of Latin America.

All these factors suggest that a peripheral nation located in a system of world capitalism develops a series of disadvantageous structural conditions which inhibit its developmental strategies. These structural conditions outlined by Prebisch were representative of the situation in the '1960's. In a recent report for the United Nations Economic Commission for Latin America, Prebisch articulates further the changed socio-economic conditions prevalent in Latin America today. Prebisch suggests that industrialization has occurred in South America, but it is a form of industrialization that suffers from a specific dynamism which leads to an inadequate rate of capital formation. This inhibits industrialization and genuine development, resulting in the generation of a consumer society. For Prebisch, the impetus of this industrializing drive is the predominance of transnational corporations whose direct

investments have generated an artificial form of growth, leading to the formation of a linkage between the upper strata of the peripheral society with the core nation, and the emergence of a bulging middle strata which further induces excessive consumption. In addition, the practices of the transnational corporations do not encourage production strategies that would encourage peripheral self-industrialization. In sum, a dependent social and economic structure has developed which will not lead to genuine development.

On the whole, the solutions Raul Prebisch offers to overcome this dependent development bear a parallel similarity to the suggestions made by Galtung such as equitable trade relations for the periphery, cooperation between peripheral nations, etc. Frank (1963, 1974) has suggested that the dependence theory of Prebisch tends to outline the symptoms but does not derive the actual causes. According to Frank (1963, 1974), Prebisch's suggestions of change will not be successful, for he does not take into account how the bourgeoisie of Latin America are locked in the imperialist system. Thus, Prebisch's suggestions would fail as "their apparently progressive nationalism in its economic, political and ideological manifestations, had contributed to the development(ism) crisis" in Latin America (Frank, 1975:88).

This structuralist approach to the study of change

and unequal development, as illustrated by the works of Johan Galtung and Raul Prebisch, has revealed the dominance of core or centre nations over the peripheral countries. It has explained in a general fashion the dynamics of the political economy of international development and how the development of a country can be hindered if it should be located in the periphery of world capitalism. This approach, according to Petras (1978), has some drawbacks of being too abstract in terms of its exploration of the process of domination and dependency. A structuralist approach, Petras suggests, fails to come to grips with the conditions of how value is created in a capitalist economy since it elucidates inequality by examining only the distribution level. Thus, the approach is weak in providing us with a clear understanding of how peripheral internal conflict (such as class struggle) can arise. As a result, the structural perspective fails to discuss how these social forces and organizations vary historically. If the perspective could do this it would help us to understand better how political and economic forces in the core nations, as well as the periphery, produce and reproduce unequal development.

Nevertheless, the stage is set for a more radical development in dependency theory which will account for possible strategies of change that will enable the underdeveloped country to achieve an independent, self-sustaining

growth. To continue this journey, we will use the work of Andre Gunder Frank as our next guide post.

DEPENDENCY, CLASS FORMATION AND WORLD CAPITALISM

The dependency theory of Andre Gunder Frank was proposed in the 1960's as a counter theoretical work to both development theory of social change and the dependency theory proposed by the ECLA school such as Raul Prebisch and Celso Furtado. Frank's approach challenges the conceptualization of developmental strategies outlined by the ECLA school.

In a series of writings, Frank (1969, 1972) argues that the ECLA economists recognize some of the symptoms of underdevelopment and dependency but offer inadequate prescriptions for Latin America to escape from this debilitating condition. He suggests that two of the major faults of these ECLA economists are:

- 1) They misinterpret certain features of Latin America by considering the feudal elements present in Latin America as traditionally backward and as inhibiting development. Furthermore, he argues that this misinterpretation leads to a conceptualization of a dual society thesis which fails to account, in Frank's view, for the dynamic which feudal or traditional elements

have. For Frank, these feudal elements are in fact capitalistic in nature (a view which was later challenged seriously by Laclau (1971)), and they are integrated into the world capitalist system. If these areas are marginalized, it is not because of their traditional characteristics, but it is due to the historical exploitation by the centre metropole and the peripheral metropole; and

- 2) The ECLA school suggests that for Latin America to catch up with the rest of the developed world in terms of social growth, the development of bourgeois nationalism would be advantageous. In other words, they call for indigenous industrialization under the tutelage of local elites. Historically, this has led to a series of disastrous import substitution strategies. Frank counters this proposal of the ECLA school by suggesting that bourgeois nationalism does not lead to independent self-sustaining growth; in fact, all it leads to is a dependent condition because, in his view, the indigenous bourgeoisie are supportive of the efforts of the centre metropole. To this extent, Frank asserts that the only solution out of this dependent condition is a socialist revolution.

With this as a backdrop, Frank proposes his thesis of the development of underdevelopment. Before we proceed any further, perhaps it would be a useful exercise to define what we mean by dependence. The students of dependent development have outlined some characteristics of dependency such as external influence on indigenous development, structural conditions blocking local initiatives to indigenous growth, formation of social classes whose interests are in common with metropolitan bourgeoisie and, in a nutshell, non-autonomous growth. A good list of these characteristics can be found in Colin Leys' article, entitled Underdevelopment and Dependency: Critical Notes. Nevertheless, in my view, a clear concise definitional statement of dependency can be located in the work of the *dependista* Theotonio Dos Santos where he defines dependence as:

"a situation in which the economy of certain countries is conditioned by the development and expansion of another economy to which the former is subjected. The relation of interdependence between two or more economies, and between these and world trade, assumes the form of dependence when some countries (the dominant ones) can expand and be self-sustaining, while other countries (the dependent ones) can do this only as a reflection of that expansion, which can have either a positive or a negative effect on their immediate development."

(Dos Santos, 1970:231)

If the development of dependent relationships is grasped along these lines, Frank argues that a series of hypotheses can be generated to describe the underdevelopment

of Latin America. Frank's starting point is that underdevelopment is a product of the world capitalist metropolis-satellite structure, which exists on the international plane but with its analogues in the developing countries penetrating and structuring the economic, political and social life of these countries. He further argues that the metropolitan centres change historically in relation to the satellites. For example, he cites the case of Brazil where its early metropolises were Spain and Portugal being substituted later by Britain and then the United States in the 20th century. Within this structure, Frank argues that the metropole develops and the satellites underdevelop. One can, Frank suggests (1969:9-15), derive a set of hypotheses from this structural relationship:

- 1) In contrast to the development of the world metropolis, which is no one's satellite, the development of subordinate metropolises in the satellites are conditioned by their satellite status;
- 2) The satellites experience their greatest economic development and especially their most classical industrial development if and when their ties to their metropolis are weakest. For example, Frank cites the greatest growth stage for Brazil, Argentina and Mexico as occurring

during the period of the Napoleonic wars, the First World War, the Depression of the 1930's and the Second World War when the European Imperial powers were occupied with their own internal affairs;

3) Regions in Latin America which are the most underdeveloped and feudally inclined today are the ones which had the closest ties to the metropolis in the past;

4) Out of hypothesis 3, two further hypotheses can be generated. The first is that the *latifundia* was typically developed as a commercial enterprise to meet foreign demands. This, Frank suggests, counters the basic argument that has been generated by historians and dualist theorists that the *latifundia* was a remnant of the feudal past; and

5) The last hypothesis is that the *latifundia*, which appears to be backward, isolated and feudal today, saw the demand for their products decline and they are to be found in the regions which had the most contact with the metropolises.

Out of these hypotheses, Frank outlines the consequences of underdevelopment. In the early stages of forming his perspective on dependency, Frank focussed inordinately

on the external metropole-satellite relationship. He views this relationship as inducing certain developmental conditions which are debilitating for Latin America. In the early phases of the external influences, the natural resources of Latin America were exploited as well as its agricultural sector, resulting in the marginalization of peripheral areas. In the later phases, dependent industrialization emerged through import substitution which consequently led to the accumulation of foreign debts by the Latin American countries. As well, foreign investments led to the transfer of capital out of the country. These conditions are explicitly elaborated in the works of Fernando Cardoso (1972, 1973), Theotonio Dos Santos (1970) and Osvaldo Sunkel (1972, 1973).³

Osvaldo Sunkel (1973) has suggested that industrialization in Latin America in the 1950's was largely conditioned by external forces. The process towards import substitution was stimulated and induced by international

³ The work of Osvaldo Sunkel must be viewed in a different light. Even though his analysis outlined the dependent conditions of Latin America, his proposals for change are different from that of Cardoso and Dos Santos. In fact, Frank (1974) clearly places the work of Sunkel with those of Raul Prebisch and Celso Furtado. Nevertheless, the work of Sunkel on dependency and underdevelopment in Latin America can be utilized for our understanding of the characteristics of this distorted condition because Sunkel captures concisely these issues.

relations, balance of payments problems, and deliberate policies on the part of Latin countries to institute protection. These attempts to industrialize, in Sunkel's view, did not reduce foreign dependence; it only led to a different set of relationships. The conditions for failure were present at the initial stages when Latin America embarked on its policy to industrialize. It was confronted with shortages of manpower skills, machinery, financial resources, technology and know-how for all these tasks. Under these conditions, Latin America had to rely on external support such as loans from international monetary agencies, official foreign government aids, cooperation with transnational corporations and import of skilled manpower.

The industrializing process under the aegis of the transnational corporations has serious setbacks for Latin America. Because of the organizational characteristics of the transnational corporations, planning, design and centres of decision-making were located in the developed country. This means that new products, new ways of manufacturing these products, the machines and tools necessary for making them, and new synthetics needed for their production are developed in the metropolitan centres. Latin America has industries which are only suitable for final assembly, and on the main, they are light industries. This has led to a further trade deficit in Latin America for capital goods

imported to carry out these assembly processes. A consequence of this import substitution is that it has led to an international division of labor whereby light industrial tasks are performed by developing countries and the advanced, heavy technology are located in the metropole. The development of this characteristic industrialization further underscores the overall nature of transnationals whereby its activities are integrated horizontally and vertically in an international setting. What this means is that the transnational corporations have control from the extraction of the natural resources which are needed to fuel their industries to the sale of the manufactured products of these industries.

Facilitating this horizontal and vertical integration of the transnationals' productive activities is a set of international arrangements which facilitate the accumulation process of the transnationals. Constantine Vaitsos (1976) has identified several of these structures which provide support for the transnationals but inhibit the developing countries' access to finances and markets. He has suggested the presence of institutional arrangements which include policies of official multilateral financial institutions which orient their operations so as not to compete with transnationals. These arrangements limit the option of developing countries with respect to alternative

sources of finance, and reinforce existing channels for relations between nations and the transnationals. As well, Sunkel has argued that the existence of bilateral or multi-lateral relationships between core nation state and the peripheral nation state enhances the transnationals' investment activities.

This set of structural and political relationships suggest that there are a series of problems which can be identified with the penetration of a developing economy by transnationals:

- a) The presence of transnational corporations with their overarching control of market and productive processes reduces the ability of the indigenous developing government's control of the economy. On most occasions, there have been transfers of capital out of the developing country. In fact, Vaitsos (1976) has argued that most of transnationals' investments in developing countries are derived through a circulation of capital from one dependent nation to another. He estimates that no less than 15% of total financial needs of the U.S. based manufacturing subsidiaries abroad originated from U.S. sources for year 1973;
- b) The specific character of transnational productive processes (which we have outlined in the

previous pages), suggest that the indigenous populations in the developing nations are not being trained for specific needs of the country, but are educated towards meeting the needs of the transnationals. This leads to uneven development in terms of trained personnel;

- c) The monopolistic practices of transnationals tend to wipe out any existing local industries because of the low level productive capacity of these industries and their inability to compete in the market place. In fact, Sunkel (1973) has suggested that the transnational has replaced market forces by its vertical and horizontal integrated production techniques on the international scale; and
- d) The need for a consuming market requires the transnationals to mount massive offensives of the consumerism mentality prevalent in the metropole. This means that a small segment of the population in the developing countries are geared towards this luxury consumption. Sunkel (1973) believes that this introduces serious distortions in the allocation of private and public investment sources, and a low savings rate.

Aside from these destructive effects by these transnationals on the economies of the dependent countries, Sunkel (1973) has extended his argument to suggest that a possible alliance has occurred between the privileged sectors of the metropole and the satellite to the extent that their political views, tastes, and activities are similar. To this end, he argues that the concept of nation-state has to be re-examined. Sharing this point of view, albeit without the suggestion of re-examining the status of the nation-state, are the works of Fernando Henrique Cardoso (1972) and Celso Furtado (1971). In his work, Cardoso begins with the assumption that modern capitalism and imperialism differs from the works of Lenin. In this day and age, capital accumulation is more the consequence of corporate control rather than financial control. Because of this overarching characteristic of transnational investment, Cardoso argues that there is the evolution within Latin America of classes which are aligned with the metropole due to their relations in the productive process. He develops this theme to the point that one can derive struggle between workers who work in industries owned by transnationals and those who work in indigenous industries. Cardoso's work thus suggests that industrialization has occurred, but it is of the dependent type.

This position of dependent industrialization is

echoed in the work of Theotonio Dos Santos (1970). Dos Santos describes a new dependency in Latin America as a result of the transnationals' investments in this region. This conclusion is derived by his attempt to periodize within the history of Latin America the types of dependent relationships. For Dos Santos, there are three basic dependency relationships:

- a) A colonial dependence which is characterized by the relations between the colonies in Latin America and their European colonial masters. This dependence is featured by a monopoly of trade complemented by a monopoly of mines and manpower in the colonized countries;
- b) Financial-industrial dependency, which came into being at the end of the 19th century, with the domination of capital in the hegemonic metropolises and the investment of capital in the peripheral colonies for raw materials and agricultural products that in turn would be consumed by the metropole; and
- c) A new dependency that has occurred based on investments by transnationals, typified by a technological and industrial base.

This new dependency to Dos Santos places limits on Latin America's industrial development. The characteristics

of these limits have been outlined in the previous pages in the work of Prebisch and Sunkel. However, it must be stressed that Dos Santos' prognosis for remedying this dependent condition is different from that of Prebisch's and Sunkel's, in that he suggests a transition to socialism as the strategy.

All these analyses tend to concentrate inordinately on the external relationships of the satellite with the metropole, while paying lip service to the internal elements which might help to reproduce this dependent situation. This is the case for the early works of Andre Gunder Frank, such as Capitalism and Underdevelopment in Latin America and Latin America: Underdevelopment or Revolution, which have been criticized for an over-emphasis on external relationships to the virtual exclusion of the internal elements and relations of production. What this means is that Frank does not take into account the internal class structure and political relations that support the development of dependency. Ernesto Laclau (1971) has carried this critique further by suggesting that Frank dispenses with the relations of production since he situates the fundamental contradiction of underdevelopment in the sphere of circulation rather than production. For Laclau, this blurs the picture, as it will not explain fully why some countries have to be underdeveloped while others are developing. However, by focussing on

production, Laclau suggests that we can discuss the rate of growth of organic composition of capital *vis-à-vis* the rate of surplus value. Following Marx's dictum on the falling rate of profit, he asserts that super exploitation of labor in the periphery has to occur to counteract the depressive effect on the rate of profit (in the era of competitive capitalism) due to the increasing organic composition of capital in the advanced industrialized countries. Therefore, the peripheries are in an ideal position to play this role of suppressing the declining rate of profit and thus maintaining the accumulation process. As well, Laclau insists that Frank mistakenly identifies all aspects of the economy of Latin America as being capitalistic, which for him is faulty in terms of Marx's categorization of what capitalism means. Laclau notes that there are different modes of production existing in Latin America and the way each labor process is organized is different; therefore, this factor has to be considered in the final analysis of underdevelopment.

Secondly, a major criticism of dependency theory at this stage is that it only analyzes underdevelopment *vis-à-vis* Latin America. What this means is that it accounts for change only within the ambit of the Latin American context and does not take into consideration the world-wide historical process of capital accumulation. What is suggested is

that analysis of development and underdevelopment has to be traced on a historical, world-wide basis, and that the development of the metropole and the underdevelopment of the periphery has to be viewed as a single process.

These criticisms were faced by Andre Gunder Frank in a series of subsequent works. In 1972, Lumpenbourgeoisie: Lumpendevelopment was published to answer these criticisms. The work focusses explicitly on the internal factors such as class and social structure, that facilitate the development of underdevelopment. However, it must also be stated that even though class analysis is introduced by Frank, the framework he provides for analysing classes tends to be too schematic to afford us the opportunity to investigate fully class relations. Frank's account of the class structure in a satellite is too broad to fully appreciate the various classes, their alliances and their dynamics in a satellite. As well, it has difficulty accounting for the historical transformation of classes through class struggle since class analysis is not the central focus of Frank's framework, and therefore he has difficulty introducing it other than 'tacking' it on at the end. In fact, Colin Leys (1977) and James Petras (1979) have criticized Frank for this ad hoc implementation of class analysis.

Nevertheless, by stating all these criticisms it does not necessarily mean that Frank's framework is so weak

that it cannot explain dependency and underdevelopment. It is strong in its structural formulation of how underdevelopment occurs and how it is perpetuated. It is along this direction that Lumpenbourgeoisie: Lumpenddevelopment attempts to explain the internal relations of the satellite which induces underdevelopment and dependency as indicated by a historical examination of the history of Latin America since the Spanish Conquest, and suggests that the Conquest locates Latin America in a position of subjection and colonial dependence. This means that the metropolis (which changes over time) continuously formed and transformed Latin America's internal relations as well as its culture in such a way that it has brought into existence a correspondence of interest between the bourgeoisie of the metropole and the lumpenbourgeoisie of the satellite. What results is a series of social, political and economic policies which enhance the metropole and the lumpenbourgeoisie in the satellite but also induces lumpenddevelopment. By this work, Frank suggests that in order to understand dependency and underdevelopment it is important to consider the external and the internal processes. As well, he underscores the negativity that dependency has for the culture of the underdeveloped society in the way that it assimilates the dominant metropole's ideology and by this act helps to reproduce the dependent situation. This position is echoed further in

a work published in this period entitled: Economic Dependence, Class Structure and Underdevelopment Policy when he (1972:20) writes:

"It is therefore important to understand that throughout the historical process, dependence is not simply an "external" relation between Latin America and its world capitalist metropolis, but equally an "internal" indeed integral, condition of Latin American society itself, which is reflected not only in international and domestic economies and politics but also has the most profound and far reaching ideological and psychological manifestations of inferiority complexes and assimilation of metropolitan ideology and development theory."

There is a significant impact on the developmental strategy of a developing country due to this cultural reorientation, because with the destruction of the local culture and the superimposition of the foreign culture, indigenous critique of foreign control is robbed of its necessary potential as a force of negation. Developmental strategies tend to be shaped towards fulfilling the interests of the foreign transnationals in the age of monopoly capitalism without any sense of indigenous developmental "well-being". This cultural destruction is a historical process emanating from colonialism whereby the colonial powers replaced the basic social institutions and tribal arrangements to fit the mode of appropriation. By this series of actions, foreign intervention is legitimated and reproduced. What is most devastating about this is not only that the indigenous culture is destroyed, but also a critical impulse which could be used

as a counteracting force for change is sublimated. Frank is one of the few in the field who is aware of the negative effects in a cultural sense of the metropole's action in the satellite. However he does not, to my knowledge, recognize that by replacing the indigenous culture with a foreign ideology, it is sublimating the critical impulse which can be harnessed for revolutionary action, which he so strongly suggests as the only strategy for dependent-free development to take place.

Nevertheless, Frank's recent contributions such as World Accumulation and Dependent Accumulation and Underdevelopment attempt to further redress the criticisms that were launched at his earlier formulation of dependency theory. In these new works, he transcends his old perspective of Third World dependence to one of uneven capital accumulation on the world scale with unequal development. This is mainly to address the criticisms that were levelled at him for examining underdevelopment through Latin American eyes and, as well, failing to account for the accumulation of capital historically and on a world-wide basis. Frank, in these works, suggests that he is examining modern history as a world-wide historical process driven by the motor force of spatially unequal and temporally uneven capital accumulation which differentiates the world capitalist system into developed and underdeveloped regions. To this end, he

suggests that the history of the modern world can be periodized into three main periods: a) Mercantilist (1500-1770); b) Industrial (1770-1870); c) Imperialist (1870-onwards). The examination of world history into these three categorical periods has shown how world capital accumulation has led to the differentiation of regions within the single all-embracing economic system. Unequal exchange between these regions, combined with the different rates of transforming the productive, social and political relations within regions, has ushered in capitalistic development in certain areas and underdevelopment in others. What Frank is suggesting is that this division of the world into regions through a process of unequal exchange and a differentiation internationally in terms of the division of labor has led to the underdevelopment of certain areas. By this approach, Frank (1978) is trying to obviate his old thesis, which has been criticized for its over-emphasis on circulation, through an examination of production and exchange relations at the same time. Nevertheless, the circulation moment still plays a significant part in Frank's (1978) overall analysis. This is because, for him, circulation is the moment whereby capital becomes capital again and this fact cannot be neglected. Frank quotes from Karl Marx's Grundrisse to support his point:

"Circulation is itself a moment of production, since capital becomes capital only through circulation."
(Marx, 1973:520)

Implicit in this formulation of world accumulation and the consequent development of underdevelopment in the peripheral regions is the supposition of the existence of systemic connections between regions in a single historical process by the 16th century. What this means is that historical events are explained in a simultaneous, processual fashion whereby changes in one part of the globe affect other social processes in another part. Thus, it can be argued, Frank asserts, that the transition from feudalism to capitalism in Western Europe in the 16th century is reflected by the rise of the second serfdom in Eastern Europe, and with the incorporation of parts of North America as a silver producing area. This leads to a world-wide connection whereby the silver from the New World, and the grain from Eastern Europe supported the slow rise of the capitalistic system in Western Europe. It further suggests that several modes of production were existing in a simultaneous historical period facilitating the accumulation of capital. The world accumulation process, Frank would argue, thus transforms as well as incorporates different indigenous modes of production existing in different parts of the world capitalist system. In this fashion, Frank asserts that the slave mode of production which existed in the New World was essential to capitalist accumulation.

This transformed perspective of Frank suggests that

certain regions of the world can be unevenly developed into peripheral regions; this process might give rise to what Frank terms subimperialist centres, whereby certain countries might benefit partially from this world-wide accumulation and be transformed, in later historical epochs, into metropolises. An example of a subimperialist centre would be New England in the 16th century, whereby its role in the accumulation process of the world capitalist system permitted merchant capital accumulation. Subsequently, this led to investments in industrialization in New England and mid-Atlantic colonies that later provided the base for America to develop as a metropole. However, the conditions for transformation into a metropole are contingent on several conditions such as capital accumulation, the growth of an indigenous bourgeoisie, etc.

This transformed perspective of Frank adds a certain dynamic towards understanding the sources and consequences of social change. It adds to an understanding of primitive accumulation and introduces new dimensions to the discussion of the capitalist world system. What this type of analysis can do is to outline for us the dynamics of capitalism and its reproductive capacities. It helps us to conceptualize the process of underdevelopment and development as a single process; and as well accounts for the underdevelopment of regions or nations.

An approach of this nature has developed widespread popularity amongst students who are interested in examining the capitalist system on a world-wide basis. This approach has been profoundly affected by the analyses of Immanuel Wallerstein (1974), Samir Amin (1974) and the studies of unequal exchange by Arghiri Emmanuel (1972).⁴ Like other novel approaches, this perspective has its critics (Brenner, 1977, Skocpol, 1976). Rather than going into an exegesis of the criticisms levelled at this approach (which is not the intention of our review), I would instead suggest the significant point of departure which this approach has pursued and criticisms of it.

Frank (1978, 1979), Wallerstein (1974) and to a certain extent Amin (1974) have suggested that accumulation in the core is a result of surplus creation in the periphery with surplus being transferred to the core. This explanation to Marxists like Paul Brenner (1977) ceases "to locate the dynamic of capitalist development in a self-expanding process of capital accumulation by way of innovation in the core itself" (Brenner, 1977:29). In a way, Brenner's

⁴ Frank's formulation of accumulation on the world scale and underdevelopment has just been published in 1978 and 1979. Even though it has appeared at such a late date, we consider him as one of the early proponents of this approach. In fact, in his forward to Dependent Accumulation and Underdevelopment, he suggested that the shift to this reformulated perspective was under way as early as 1969/1970.

approach reminds us of the debate between Paul Sweezy (1976) and Maurice Dobb (1976) over the prime movers behind the transition from feudalism to capitalism, viz. the sources of the accumulation of capital. In fact, Brenner's criticism is derived from his readings of Marx's Capital whereby accumulation evolved through class struggle in feudal Western Europe. Thus, Marx's scholars such as Brenner et al deemed the theoretical formulations of Wallerstein and Frank as a violation of the basic doctrines of Marx. Whether scholars like Wallerstein and Frank have violated the principles of Marx's theory of primitive accumulation cannot be discussed within the length of this appendix. I would suggest that they have departed to some extent from classical theories on primitive accumulation and imperialism, such as those of Lenin's (1970). Rather than seeing the accumulation process as being generated through the core and downplaying the role of the periphery, the works of Frank, Wallerstein and Amin begin from the world economic structure through to the development of the laws of motion of capital accumulation. In fact, Amin goes so far as to suggest that Marx's Capital is only a study of the capitalist mode of production and it is not a study of accumulation on the world scale. In Phillip O'Brien's view, this perspective therefore suggests interesting formulas for understanding dependent economies that are different from classical

theories of imperialism and underdevelopment (O'Brien, 1975: 128). Thus, one should assess this approach in light of the historical accounts of capitalist accumulation on the world scale, or in Frank's words where "theory is history", rather than gauging a theoretical approach *vis-à-vis* its purity to its original masters. In a more polemical way, in Aidan Foster-Carter (1973) terms, we could label Marxists like Brenner et al as paleo-Marxists who cling "dogmatically to a Marxist *Weltanschauung* and deducing scholastically from this what the world "must be like"" (Foster-Carter, 1973: 25).

END

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