



Patterns amid Progress

The Politics of North Carolina's High Technology Policies in the 1980's

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I certify that the following thesis is my own work
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Introduction

After a decade of economic dislocation, communities across the industrialized world faced the 1980's with apprehension. So much seemed fundamentally new in the economy: heightened competition in the global arena, protracted periods of simultaneous inflation and unemployment, the breakdown of traditional forms of industrial policy. While all agreed that the new realities demanded new strategies, industrialized countries and the regions within them responded to the crises with widely divergent approaches. The variety of reactions suggests that underlying economic trends did not themselves determine any particular response. Instead, communities confronted a series of choices, decisions that were as much political as economic. The moment required policy-makers to grapple with the new economic realities, but also to address the configuration of interests, institutions and ideas that defined their society's political life. For this reason, studies of different communities' responses to the turbulence of the seventies are not just accounts of economic transformation. They are also stories about the enduring effects of political power and political values in a time of economic change. Through the intensive analysis of particular cases, we can learn a great deal about the politics of economics in industrial societies.

This essay is about the efforts of one state in the United States, North Carolina, to come to terms with the changing face of the world economy in the 1980's. Since typical national responses tied to monetary and trade policy were unavailable to state governments, their experiences instead provide examples of the use of industrial policy: direct attempts to channel economic growth within state borders. Under the leadership of Governor James B. Hunt, North Carolina launched a campaign to transform itself into a center for high technology industries. By

promoting high-level research, the recruitment of high-tech companies, and worker training, State government hoped to recast an economy reliant on declining manufacturing sectors into one riding a wave of technological progress. The bold initiative was a radical break with the past, a thoroughly new departure in industrial policy. But because the turn to high technology was a political response to economic change, it occurred within a framework of actors, institutions, and values that had evolved over years of political and economic development.

Taken as a whole, I will call this framework a "top-down approach" to industrial policy, a phrase that carries both procedural and substantive meaning. In procedural terms, policy-making in North Carolina took place within institutions that fostered the participation of only a narrowly defined set of participants. While the business community and the powerful State cooperated on a range of economic development projects, other actors like the labor movement remained on the outside. In substantive terms, top-down policies entailed bold actions to promote industrial development, justified on the grounds that the benefits would "filter down" to all North Carolinians, crossing socio-economic and geographical lines. So "top-down" refers both to the process of policy-making and to the nature of the policies that emerged from that process. This approach to industrial policy contrasts with alternate frameworks that would include a broader range of participants (like labor representatives) and that would seek to benefit dislocated workers and depressed regions more directly, rather than relying on automatic processes of filtering-down.

The top-down approach to industrial policy was the product of North Carolina's particular configuration of political power, institutions, and ideas. Accordingly, this essay traces the historical patterns that gave rise to these arrangements. Four elements stand out as the primary

underpinnings of top-down strategies:

- The emergence of a powerful, activist State committed to the promotion of industrial development through recruiting outside industry and fostering research and education geared toward economic growth;
- The direct involvement of the business community in these efforts, especially that of "modernizing" elements within business with a direct interest in economic expansion and a willingness to support public projects;
- The weakness of the labor movement and its consequent exclusion from policy-making;
- An ideology of progressivism among the modernizing elite that reinforced the top-down approach in both its procedural and substantive principles.

All of these patterns converged at the end of the seventies to produce North Carolina's particular turn to high technology. They made aggressive action in response to economic change possible. But since these trends were themselves the result of long-term historical development, the policies that emerged bore the unmistakable stamp of the past, embodying North Carolina's long-held commitment to top-down economic development. Under the new programs, pro-modernization State, corporate, and university officials continued to guide the course of industrial policy. And leaders justified the projects on the grounds that aid to industry would benefit all citizens as advantages spread. Despite the boldness of the initiatives, then, the process and substance of the turn to high technology were familiar.

In Chapter One I lay the groundwork for the telling of the story, reviewing a variety of theoretical perspectives used to account for the emergence of distinctive State policies. I put forth a historical approach to the study of political economy that guides the rest of my discussion. In Chapter Two I explore three critical periods of economic and political transformation in North Carolina's history. It is out of these earlier times of change that the patterns of top-down economic development shaping the

events of the eighties emerged. In Chapter Three I recount the turn to high technology itself, focusing on the watershed period of 1977 to 1984. Trends in the development of the State, the configuration of interest groups, and political ideology converged to generate not just any program of economic change, but North Carolina's distinct high-technology initiatives, rooted in the top-down approach. In Chapter Four, I review the legacies of the story told in Chapters Two and Three. The characteristics of the policies that emerged highlight the historical patterns I trace; they also help explain the successes and failures of the policies.

Chapter One

Characters and Context

Story-telling about economic policy-making

This essay is a story about the emergence of high technology as the centerpiece of North Carolina's economic development strategy in the early 1980's. But I want to start by saying a few words about story-telling itself. Stories about public policy are very intricate ones, with broad casts of characters and multiple strands of plot. They do not tell themselves; there are no straightforward newspaper accounts that trace the twists and turns of policy-making in all their complexity. People tell stories about public policies in order to make sense out of them, to bring order to what seem like hopelessly complicated swarms of actors and events.

I want to argue in this chapter that many of the prevailing ways of telling stories about economic policies fall short in two ways. The first problem lies with casts of characters theorists present. I will argue that many contemporary theories try to derive too much explanatory force from the actions and interactions of "societal" characters, namely economic interest groups. In doing so, they fail to present an adequate account of the role of the State itself, which I define here simply as the bureaucratic and political officials that make policy.¹ Leaving out the State not only omits important explanatory factors; it also leads theorists to misconstrue the roles of societal actors. The second shortcoming is an emphasis on character at the expense of context, a tendency to assume that policies can be "read off" from the particular configuration of interest groups represented in society. This assumption ignores the context within

¹ I will capitalize "State" to refer to the official bureaucratic and political apparatus of a society; "state" will refer to territorial units of the United States such as North Carolina.

which political struggles take place, the historical factors that shape the interests and power of the characters and thus the outcomes of policy-making. The theories I will consider do point out vital aspects of the tale, but standing alone they leave nagging questions about the role of the State and about the context of political action.² Some, but never all, of these concerns can be addressed by a new type of story that recognizes the value of contemporary accounts but also the necessity of adding to the analysis. And it is with this synthesis that I will proceed to the story of high-technology policy in North Carolina.

Characters in the story: finding space for the State

Most discussions of economic policy-making focus on the political role of societal actors, most notably economic interest groups such as the representatives of business and labor. Pluralists, marxists, and elite theorists alike tell a story of the distribution of power in civil society, and then argue that State policies fundamentally reflect this array of forces. Their accounts of power in society vary immensely, but they agree on its centrality to policy-making.³ And there is no doubt that this focus has a certain justification to it. Policies affect groups in society differentially, and thus it is not surprising that they organize themselves and seek to steer State action in favorable directions. Any story about economic policy has

² Cf. Alford and Friedland (1985): 390; 398.

³ Classic statements of pluralist doctrine include Dahl (1961) and Truman (1951). For summaries of pluralist theories see Held (1987): 188-201 and Held and Krieger (1984): 8-11. For elite theory, see Mills (1956): 4-28. Marx and marxists espouse a variety of perspectives on the State. A pure instrumentalist theory is set forth in The Communist Manifesto: "The executive of the modern State is but a committee for managing the common affairs of the whole bourgeoisie." (Marx and Engels [1984]: 37) In other passages, Marx (and subsequent marxist theorists) have allowed for the State to represent a balance of class forces rather than outright capitalist dominance, a position shared by non-marxian class theorists as well. See Offe (1984): 160; Przeworski and Wallerstein (1982): 215; Esping-Andersen (1985b): 223-4; Korpi (1983): 14-7; see also "corporatist" theories, Schmitter and Lehbruch (1979). The more common marxist formulation, functionalism, is addressed below.

to place the actions of economic interest groups in a central position.

But in a common sense understanding of politics, it is bureaucratic and political officials and institutions that "make" policy. They are doubtless subject to the limiting influences of powerful interest groups, but they retain some capacity for independent action. Their autonomy is especially evident when interest groups pull them in divergent directions: they cannot possibly serve all interests at once. Furthermore, they must have interests of their own which they rationally pursue. Are these common sense notions of the State's autonomy simply illusions, or does some account of the State as a character deserve a place in stories we tell about economic policy?

In recent years, a number of theoretical perspectives have attempted to carve out a space for the State that allows a degree of autonomy. Neo-marxists have grappled with Marx's ambiguous legacy in an attempt to account for the apparent ability of the "capitalist" State to act in a way not immediately in harmony with capital's expressed desires, putting forth various theories of the State's "relative autonomy."⁴ Miliband, for example, suggests that the State is a "separate entity" acting on capital's behalf, but not at its "behest."⁵ Even more unorthodox, Offe writes that the State does not "serve" any class's interest in the sense of acting deliberately to advance that class's position.⁶ The accounts the neo-marxists give of the State's relative autonomy rest on a "functionalist"

⁴ Nicos Poulantzas (1969, 1976, 1978), Ralph Miliband (1970, 1973a, 1973b), and Claus Offe (1984, 1985) are the most prominent theorists of the state's relative autonomy. There are significant differences between them. For example, Offe is the most eloquent exponent of neo-Marxist functionalism, but he also departs from its logic more frequently than others. At these times, he leans more towards the theories of neo-pluralists like Lindblom and social democratic "labor movement" theorists like Esping-Andersen and Korpi. For the purposes of this section, however, the neo-marxists have enough in common to allow generalization. For a survey of their debate, see Held (1987): 206-14.

⁵ Miliband (1969): 51.

⁶ Offe (1984): 103-5, 120.

analysis of society.⁷ They see the political economy of capitalism as a coherent system of interdependent elements that contribute to the mode of production's long-term viability. For example, the State performs the critical functions of ensuring both capital accumulation and the legitimation of capitalism in the eyes of workers and consumers. In order to do so, however, the State must retain some autonomy. Competition among fractions of capital threatens to weaken the strength of the whole class; capitalists' pursuit of short-term imperatives often endangers the system's long-term health. Thus the State must transcend warring factions and act at times against capital's short-term wishes to ensure its long-term survival.⁸

There are four central problems with this story of State autonomy. First, even if we accept it, the theory gets us nowhere in our attempt to explain the emergence of particular policies. Why do states choose certain strategies when others could conceivably serve the same functions for the system? Why do States with relatively congruent social structures and facing similar global economic trends exhibit such widely different policy responses? The functionalist approach can only provide the broad context in which these questions might be answered, and thus it leaves us back where we started. Second, the theory is constructed so that any State policy can be linked to some alleged functional requirement. Thus Poulantzas writes: "All measures taken by the capitalist state, even those imposed by the popular masses, are in the last analysis inserted in a pro-capitalist strategy or are compatible with expanded reproduction of capital."⁹ If a policy does not contribute to capital accumulation, the

⁷ For a discussion of marxist functionalism see Elster (1985): Chapter 1.4.

⁸ Offe (1984): 91-100, 120; Poulantzas (1969): 72-4.

⁹ Poulantzas (1978): 185.

functionalist can argue that it helps legitimate capitalism instead. Without the possibility for dysfunctional State policies or other counter-evidence, the argument becomes tautological.

Third, even if we could agree that capitalism required that certain functions be served and that certain State policies were the only mechanisms available to serve those functions, we might still want an account of concrete, historical events that generated the policies. The functional explanation would tell us why policies existed, but we would have no account of how State officials came to recognize and act upon the imperatives of capitalism. We would need to go beyond the underlying functional explanation to arrive at a story that we could compare to others or extrapolate into the future.

Finally, while these theories at times represent a promising departure from pure class-based conceptions that recognize no independent role for the State, they collapse into theories of class-dominance in the end. Miliband writes: ". . . the state in these class societies is primarily and inevitably the guardian and protector of the interests which are dominant in them."¹⁰ Poulantzas's conclusion, cited above, is the even more striking assertion that all State actions serve capital. "Relative autonomy" turns out to be only a technical independence; ultimately functional imperatives necessitate that the State act for the capitalist system's long-term stability. But if the State cannot ever act against capital, it is not really autonomous at all.¹¹ To account for the State's independence, we need to follow a line of argument that avoids these

One approach comes from theorists of social democracy such as Walter Korpi and Gøsta Esping-Andersen (and, at some moments, Offe

¹⁰ Miliband (1969): 238.

¹¹ Parkin (1979): 126-8; Elster (1985): 421-2.

himself), who advance the view that State policy plays an active role in structuring class conflict. Concentrating on welfare state and collective bargaining institutions, they argue first that it is possible for labor to organize itself and win real gains from the State.¹² The resulting State policies establish the framework within which future conflict takes place. For example, institutionalized welfare policies that are universal in coverage can strengthen workers' class solidarity, boosting the labor movement's position in future bargaining or political action. In this way, Esping-Andersen writes, policies "hold the potential of altering the balance of class power in favor of the disadvantaged" to achieve the "social democratization of capitalism."¹³ Of course, State action can work the other way as well, boosting capital's ability to organize or bringing business representatives directly into policy-making.

This approach is an advance over functionalist neo-marxist theory in a number of ways. Rather than relying on notions of functional imperatives, it provides a historical account of political processes. It dispenses with the notion that capital is thoroughly dominant without exception in politics. And it acknowledges that it is impossible merely to "read off" policy outcomes from an objective characterization of class forces: State policies themselves are crucial intervening variables. But despite these advantages, social democratic theory still suffers from the central problem of the society-based framework, interpreting State action as fundamentally an expression of class forces. Though policies can alter the nature of class struggle, class ultimately sets the parameters of politics. Writing about Italy, West Germany, Britain and Sweden, Esping-Andersen

¹² Korpi (1983): 172-3.

¹³ Esping-Andersen (1985b): 224; (1978): 47; Esping-Andersen and Korpi (1984): 181; Longstreth and King (1989): 26-7; cf. Offe (1984): 106-9.

and Friedland conclude: "The different contours of the four countries' postwar history can be explained by the alignment of class forces and class coalitions in the making of economic development and state policy."¹⁴

What they continue to ignore is the State as an actor in its own right.

We must recognize that State officials act in politics in part on the basis of their own interests. Politicians must face electorates, and so they have interests in the success of certain policies upon which they believe voters will judge them. Bureaucrats develop expertise in the administration of certain kinds of policies, and their careers come to depend on these programs' continuation. And as initiatives become more institutionalized, State officials of both kinds gain an even greater stake in the policies' advancement. Recent theorists have posited these kinds arguments about State autonomy. One school, following the "public choice" approach of writers like James Buchanan, has contributed to the debate by stressing the self-maximizing behavior of State officials.¹⁵ A more persuasive angle comes from a number of neo-Weberian "State-centric" theorists. For example, Theda Skocpol and Margaret Weir argue that "states may be the sites of autonomous official action, not reducible to any social-group pressures or preference."¹⁶

There is a danger that these kinds of theories will swing too far in the direction of attributing autonomy to the State. In the closing chapter of the State-centric "manifesto" Bringing the State Back In, the editors caution that the State's autonomy is limited in scope, since elected and

¹⁴ Esping-Andersen and Friedland (1982): 34-5; Korpi (1983): 19.

¹⁵ See Buchanan (1978) and Niskanen (1973). I will argue below that their failure to account for the context of this behavior lessens the validity of their story.

¹⁶ Skocpol and Weir (1985): 118; see also Skocpol (1985): 21; Skocpol (1979): 29; Evans, Rueschmeyer and Skocpol (1985). Other State-centric accounts include Nordlinger (1981), Krasner (1978). For relevant writings by Weber, see Weber (1947): especially 77-9, 82; (1968): 1094-5, 1394-5, 1402.

appointed officials are constantly tugged or hemmed-in by the interplay of interests.¹⁷ But bringing the State in as central character helps us understand the nature of societal constraints more fully. Lindblom's "privileged position of business," for example, is not due solely to capital's ability to control the State as its exclusive instrument. Rather, political and bureaucratic officials recognize that in a private economy, society relies on business executives to produce. And since the electorate holds government responsible for economic outcomes, the officials' success in office is contingent upon the performance of entrepreneurs. The result is not outright business control of the State, but a framework of constraints upon State action obliging officials to place a degree of priority on the interests of capital.¹⁸ None of this is to say that societal actors do not influence State policy more directly, through lobbying or direct participation in governmental structures, as many society-based theories contend. The point is that beyond these obvious mechanisms of societal impact on policy are other forms of constraint only understandable through a recognition of the State's autonomous role.

Furthermore, we must regard the relationship between State and society as a two-way affair. As I noted above, social democratic theorists argue that State power can affect the balance of influence between societal forces. By giving groups strategic positions in the making or implementation of policies and by creating conditions that undergird or undermine group solidarity, the State plays a role in building and eroding the power of societal groups.

¹⁷ Evans, Rueschmeyer and Skocpol (1985a): 356.

¹⁸ Lindblom (1977): Chapter 13; Offe (1985): 192; (1984): 103-5, 120. Lindblom's argument here differs from that of the marxist functionalists. Although State actions respond to "requirements" of the capitalist system, the State does not exist solely to serve this function. Offe departs from functionalism here as well, writing of the State's "institutional self-interest." For another example of this kind of argument, see Ingham (1984): 37, 125-35, Chap. 9.

Coupled with an account of societal constraints, the State-based approach offers a useful analytical tool for explaining policies. Here, I have focused on the State as a whole range of political and bureaucratic officials who, in addition to responding to societal pressures, pursue objectives that originate with their own interests. Their interests lie in a variety of places: re-election, promotion, making names for themselves. And as they follow these motivations, they alter the course of policy-making. Their actions must be part of the story. But the State is also a set of institutions, and to that extent it is not just a character, but part of the context of policy-making as well. The next section will address the importance of contextual factors, including the State.

Context: the structure of political conflict

What emerges from this discussion is a way of telling stories about policy that includes State officials as central characters. But this advance would provide only a partial improvement, supplying an elaboration of the society-based perspective that adds State officials to the list of groups that vie for control over policy-making. The new theory would still attempt to "read off" policy outcomes from an "objective" calculation about the balance of power between interests, including the State.¹⁹ But such a perspective would ignore three very problematic questions:

(1) Why do the characters in the story define their interests the way they do? The tendency of society-based theories is to read off a group's perception of its interests from its "objective" position in society. But to do so requires a dangerous conceptual leap. As Fritz Scharpf points out,

¹⁹ This is where public choice accounts of the State fall short. They tend to assume universal, ahistorical bureaucratic motives like "budget maximization" when in fact State officials are acting in much more complex institutional and economic environments.

characters faced with similar objective circumstances often make very different strategic choices about economic issues.²⁰ Consequently, a historical account of why characters indeed want what they want must be a central component of any story of interest group competition.

(2) How have the different actors come to possess the power they do vis-à-vis the others? Power is not a simple, uni-dimensional variable that can be measured on a single yardstick. Actors rely on a variety of resources to build the bases of their power, from financial strength to organizational muscle to legitimacy in the eyes of the State or public. They accumulate these resources over years of political struggle, reacting to one another's actions and to changing features of their society. And it is the particular configuration of actors' resources, not some generic metric of power, that determines the contours of political conflict over policy. Again, what is called for is a historical account of how power has accumulated in a given society.

(3) How do interests thus defined and power thus accumulated translate into policy? Certainly the process is not automatic. These "inputs" must pass through the black box of policy-making before they emerge as policy "outputs." What is the nature of this black box? The answer lies in the complex of organizational arrangements and traditions of past policies that mediate between interest group competition and the outcome of the decision-making process. These factors, too, are historical products, and a full story of policy-making requires an account of their origins and nature as well.

The answers to these questions demand a historical approach to the study of political economy, an analysis that looks for patterns in the course

²⁰ Scharpf (1984): 261.

of a society's economic and political development to explain why State actions take the shape they do. To develop such a perspective, I will draw upon a number of theories that have emerged in recent years. Some are approaches I have already introduced, such as the social democratic theories of Esping-Andersen and Korpi and the State-centric approach of Skocpol and others. Another set is the so-called "new institutionalism" espoused most persuasively by Peter Hall. Related authors include Charles Maier, Peter Katzenstein, Kenneth Dyson, Fritz Scharpf and John Zysman. What these theorists share is a reliance on historical analysis that integrates accounts of character and context.

Many elements of historical context are important, some more than others in different societies and within societies on different issues. There is no one list of elements that determine the outcomes of policy-making, no model that predicts patterns for all societies. Instead, what I will present here is a survey of two major components of context that seem to recur in numerous instances. The first is a series of economic factors, like the development of industrial structure, the relationship of a society to larger economies, and patterns of industrial geography. The second is a set of political and institutional concerns, like the formation, organization, and actions of interest groups and political parties, the development of the State's policies and apparatus, and the contours of political ideologies.

The economy serves both as the object of policy-making and a fundamental element of the context in which decisions are made. Patterns of industrial development in a society reach back to the origins of industrialization itself, where important trends are set in motion. They evolve through major stages in an economy's development. Here, I will

discuss three significant economic factors that demand attention.²¹

First, an economy's "industrial structure" -- the mix of industries that make up its foundation -- has important political consequences. The fortunes of the labor movement may suffer in an economy dominated by labor-intensive industries in which controlling labor costs is capital's top priority. And the industrial mix also affects politics within the business community: different sectors of the economy find themselves with divergent interests. A number of antagonisms are possible: "sunrise" vs. "sunset" industries; small vs. large businesses; competitive vs. monopoly capital; financial vs. industrial capital, to name a few.²² In some cases, these separate economic fortunes translate into political division.

Second, the pattern of industrial location is important because it affects the locus of political conflict in society. If industry is dispersed, a great deal of political activity might occur at the local level over concerns about local labor markets and "business climates." The concentration of industrial production might, conversely, shift political focus to the center. Furthermore, dispersion might adversely affect the ability of labor to organize effectively.

Third, the relationship of a society's economy to larger economies (national or global) sets an important framework for the development of policy. Katzenstein suggests that the vulnerability of small European states in the open world economy brings firms and workers to a recognition of the impacts of their own particular objectives on national interests. The

²¹ Because my study focuses on a state within the United States, I will not focus on the role of the national system of financial institutions. Analysts have found financial relationships to be a critical variable in cross-national and national studies. See Zysman (1983): especially 54-69; Ingham (1984): 47-77; Hall (1986): 38-40.

²² Dyson (1983): 46; Ingham (1984): Chap. 9; O'Connor (1973): Chapter 1, 41-2. Theories of economic dualism are the subject of controversy. For liberal and radical arguments for dualism see Piore and Berger (1980) and Gordon et. al. (1982) respectively. For critiques see Lever-Tracy (1984) and Hodson and Kaufman (1982).

result is a strong incentive for collaborative arrangements to adapt to industrial change.²³ Another kind of dependence on larger economies is a reliance on outside sources for capital investment, which suggests certain kinds of policies aimed at attracting it. These issues of links to larger economies are related to the importance of the timing of a society's industrialization, since "lateness" and "earliness" of industrialization only make sense in relative terms. It has been argued, for example, that late industrialization produces the need for the rapid accumulation of capital and skills, fostering a more statist tradition than in societies where economic development begins earlier and more spontaneously.²⁴

But these economic patterns do not by themselves determine policies.²⁵ They provide partial answers to the three questions I posed above, helping to account for how groups define their interests, their relative power, and the way interests translate into policy. But they only shape the framework within which struggles over State action take place. A fuller account of State policies requires an analysis of political context as well.

As recent "new institutionalist" studies of political economy point out, discussions of the political context of economic policy-making must place a great emphasis on the role of institutions in structuring the behavior of actors.²⁶ The interests of groups in society gain political relevance only when political organizations form to articulate, and indeed to formulate them. The power of these groups hinges on their ability to mobilize various kinds of resources, many of which are organizational.

²³ Katzenstein (1985).

²⁴ Dyson (1983): 42-3; see also Katzenstein (1985): 138.

²⁵ See Scharpf (1984): 261; Grant and Nath (1984): Chapter 1, 211.

²⁶ Hall (1986) is the most comprehensive statement, especially pp. 18-9, 232-3. See also March and Olsen (1984); Longstreth and King (1989): 22-3; Held and Krieger (1984): 18; Zysman (183): 78-9; Scharpf (1984): 282. Shonfield (1965) might be regarded as a precursor.

The State is not merely an "actor" in the sense I described in the first section; it is a vast array of institutions with their own commitments and practices. And it is through all of these organizational and institutional entities that economic policy emerges. As Peter Hall remarks, their pervasiveness is bound to mean that they will "leave their imprint" upon the outcomes of the process.²⁷

Two kinds of institutional arrangements are particularly important: the organization of interest groups themselves, and the institutional development of the State. The way groups are set up affects how they define their interests. Hall argues that groups base their orientations on incentives in the environment, and that these incentives derive from institutional arrangements as well as economic facts. He discusses "the ways in which organizational context alters the calculation of rational actors," affecting the very direction of the pressure that interest groups seek to apply.²⁸ So a centralized trade union movement might pursue different objectives from one that places more value upon plant-level autonomy. Or a segment of the business community whose main political outlet is high-level consultation with State officials will define its interests differently from one that relies on a pressure group for influence.

Next, as theorists from across the spectrum have remarked, organizational resources also play a large role in determining the balance of power within society, answering questions like these: Does one political party have the consistent upper hand in partisan conflict, and if so, what are the consequences for policy? How strong is labor vis-à-vis capital? If there are divergent interests within the business community,

²⁷ Hall (1986): 14.

²⁸ Hall (1986): 9, 14, 19.

which ones exert the most influence on policy?²⁹ Two caveats are in order. It is important to look widely for resources possessed by different groups, since obvious bases of power like "peak organizations" are not always the site of real influence. And because organizational assets evolve over time as political struggle proceeds, a coherent story requires a historical account rather than a simple tabulation of "power resources" at any one moment.

The second important organizational influence on policy-making is the institutional shape of the State and its policies. First, State action can affect the balance of power between groups in society. For example, strong welfare policies undergird the political strength of the working class, building its organizational solidarity.³⁰ And obviously State institutions that bring capital, labor, or both directly into policy-making have profound consequences for societal power.³¹ John Zysman concludes: "The state can be as active in shaping the political competitions as it is in molding the marketplace. Therefore, the political outcomes within each sector depend on state policy as much as they shape it."³²

State institutions exert a second influence on politics: as policies develop, they become embedded in certain ways, making it more likely that future programs will follow patterns of the past. Embeddedness is both conceptual and interest-based. It is conceptual because past strategies shape what is thinkable for the future. Once a policy is chosen and achieves some success, what Scharpf calls "policy inertia" might set in as actors come to have expectations attached to the particular strategy.³³

²⁹ Lindblom (1977): 120-3; Hall (1986): 15; Esping-Andersen and Korpi (1984): 182; Korpi (1983); Offe (1985); Elster (1985): Chapter 6.2.2; Olson (1965).

³⁰ Esping-Andersen (1985b): xv, 316.

³¹ See Schmitter and Lehmbruch (1979); Maier (1984) on corporatist arrangements.

³² Zysman (1983): 90.

³³ Scharpf (1984): 261. See Dyson (1983): 35 on "traditions of public authority."

Katzenstein argues that the frameworks of accommodation emerging from small European states' resolution of conflicts over suffrage, the Depression, and World War II provided a foundation for post-war collaboration between social partners.³⁴ Skocpol and Weir conclude that previously established structures and policies "influence the conceptions that groups or their representatives are likely to develop about what is desirable, or possible at all, in the realm of governmental action. Thus, state structures help to inspire the very demands that are pursued through politics."³⁵ But embeddedness is more than just "tunnel vision": policies also generate constituencies that fight for their retention. The social democratic theorists argue that universal welfare schemes achieve wide popular support because they are seen to benefit everyone, giving a strong segment of the populace an interest in their continuation.³⁶ Even stronger vested interests come into being inside the State itself, as both political and bureaucratic officials develop a stake in certain policies. Their personal advancement comes to depend upon the extension of the strategies to which they are attached.³⁷ So States accumulate sets of "policy instruments" that they use again and again, "policy legacies" that endure from one era to the next.

The danger of all this focus on institutional arrangements is that it will stray into a kind of institutional determinism, resembling the interest-group determinism I criticized above. While institutions explain a great deal of the process and content of economic policy-making, it is still impossible to read off outcomes from organizational arrangements. A given set of structures still leaves policy-makers with a variety of

³⁴ Katzenstein (1985): 139-57.

³⁵ Skocpol and Weir (1985): 118.

³⁶ Esping-Andersen and Korpi (1984): 181-5.

³⁷ See Zysman (1983): 54.

possibilities. I want to argue that a more complete story emerges if the tale includes an explanatory role for political ideology.

Bringing political ideas on board carries with it two main pitfalls. The first is that idea-based explanations are often too sweeping and vague to provide any analytical power. This criticism is especially apt when a theory treats ideas that are unevenly shared as if they are uniformly accepted by entire societies. Political culture is rarely so pervasive. The second problem is that ideologies rarely explain anything by themselves. For one thing, they themselves need explaining, often by reference to the other kinds of economic and political developments I have described. Furthermore, an idea-based story must account for how ideas have an impact, and to do so often requires reference to these other strands, especially institutional context.

These concerns point to two restrictions on the use of an idea-based perspective. First, ideologies should not be construed as "dominant" and pervasive. The possibility of different understandings of ideas as well as outright conflict over them must be in the forefront of the analysis. Second, ideologies should not be at the center of the account, and they should certainly not be the whole of the story. Rather, the analysis of ideas should be firmly linked to the other historical trends under investigation.³⁸

These caveats provide a space for political ideas in an explanatory story. Indeed, even theorists who disavow "culturalist" perspectives acknowledge the importance of ideas from time to time in their accounts.³⁹

³⁸ Hall (1986): 9.

³⁹ For example, see Hall (1986) on the importance of the normative commitments of policy-makers (276); Esping-Andersen on the need for social democratic movements to displace alternate ideological commitments for workers (1985b: 227) and on the conflict between ideology and pragmatism as a determinant of strategy (1985b: 191-2, 227; Esping-Andersen and Friedland (1982): 11).

Ideologies are particularly important in the definition of interests. An example is the difference between the aims of radical and moderate trade unions. The workers they each represent have the same objective position in the economy, but the way the two types of unions define the interests of these workers differs immensely. Just as institutional arrangements shape the rational calculations of actors, political ideas affect what characters think is in their interests and thus how they behave.

Ideas also influence the arrangement of power in society. Hall argues that the power of the French State in the economy has depended in part upon a widely shared notion of étatisme, under which the State is seen to transcend factions and act in the public interest.⁴⁰ Lindblom traces part of capital's power to a pro-business ethos based on the idea that what is good for capital is good for society.⁴¹ The common thread here is the idea of legitimation. While the power of different actors springs primarily from their ability to mobilize various kinds of resources, at least a part of actors' power derives from ideas about their legitimacy.⁴²

Finally, political ideas have a direct impact on the shape policies take. As I argued above, ideas about what policies are appropriate -- policy "legacies" from the past -- influence choices in the present. But it is not simply through habit that ideas shape policies. A crucial consideration that goes into policy-making is whether a strategy will be accepted by those who have the power to block its full implementation. Policies must not simply meet the demands of petitioning groups. They must also be designed and packaged in such a way that they are accepted by a wide variety of actors, from interest groups to political bodies to the electorate.

⁴⁰ Hall (1986): 164-71.

⁴¹ Lindblom (1977): 179, 203-33.

⁴² Maier (1987): 8-12.

Most of this calculation relates to issues other than political ideas, such as whether groups have the raw organizational strength to impede a program's success. But at least a part of the story revolves again around the question of legitimation. In addition to their concrete details, policies carry symbolic meaning. So as policy-makers engineer the symbolism of policies in order to win political approval, they change the shape of the programs they promote.

Characters and context in North Carolina

In a way, the approach to political economy set forth here provides some universal tools of analysis. The roles of societal characters and the State, the determinative features of the economy, and the structure of political institutions and ideas are all critical explanatory factors in any society's development. For this reason, the approach can be deployed to compare the economic policies of diverse communities. But these same categories also demand a rigorous particularism, a resistance to sweeping generalizations that obscure the specific character of each society's evolution. So another use of the framework is the study of unique cases.

In the remainder of this essay, I want to employ the approach to tell a story of real policies, a particular set of measures taken by the State of North Carolina in the early 1980's. In accordance with the approach I have set forth here, one aspect of the tale will be a cast of characters: a growing and powerful advanced sector of capital, a waning nucleus of traditional industries, a weak labor movement, and an array of State officials who are willing and able to play a major role in the state's economic development. But the context within which these characters operate will provide the critical backdrop to their actions. Part of the story will recount the state's pattern of industrial development and the

intimately linked history of political struggle over economic policy, which together provided the basis for the choices of the eighties. The tale will stress both the institutional arrangements and the political ideas that emerged from these developments, shaping the future course of industrialization and politics.

Patterned progress

Economic and political development in historical perspective

Central to my argument is the idea that policies make no sense if they are detached from their histories, pulled out of statute books or official statements and analyzed as self-contained strategies. North Carolina's high-technology policies of the 1980's emerged not out of thin air, but out of the development of long-term historical patterns in the state's economy and politics. To explain why the policies took the shape they did, it is essential to isolate those trends in the state's development that stand out as significant over time. Emphasizing patterns does not necessitate asserting that the state's history has been one smooth line of progression. On the contrary, periods of great change have marked the evolution of North Carolina's economic and political life. In these times, long-standing patterns did not prevent change from happening. Instead, they stamped their imprints on the transformations that did occur, ensuring that elements of continuity always accompanied change.

In the history of North Carolina since the Civil War, three such instances demand attention. The first came at the turn of the century; the second in the 1950's. The third is the period which is the focus of this essay, the turn towards high technology in the early eighties. Several characteristics designate these moments as significant. All were preceded by significant economic and political changes. All were marked by new political responses to the state's economy, including changes in the institutional development of the State and State policy, the power of interest groups, and the contours of political ideologies. And in all three periods significant patterns in politics and the economy were set in motion that would shape future policies and economic growth. So trends

originating at the end of the 19th century came into play in the 1950's, and patterns from both periods persisted into the modern era, shaping the policies of the eighties.

I will argue that the thread that runs through this history is the emergence and institutionalization of a particular strategy of economic development, what I refer to as a "top-down approach." North Carolina's industrial policies can be called top-down in two senses: (1) they have been crafted by the leadership of the State and the business community to the exclusion of a broader range of participants, namely the labor movement; and (2) their proponents have promised that the policies would benefit the whole population through a process of "filtering down." This approach was not simply an idea about the right kinds of policies. It grew out of a particular configuration of interests and institutions that together made certain kinds of industrial policies dominant in North Carolina's history. In this chapter, I will begin by describing the first two periods of change in which the basic elements of this approach came to life. Then I will detail the important developments preceding the third moment, which will itself be the subject of the next chapter.

The first period occurred at the end of the 19th century, after a time of rapid industrialization and political change. Overcoming a populist challenge, the Democratic Party cemented control of the State and inaugurated years of one-party rule and an ideology among the state's leaders of "progressive," elite-led modernization. Faced with little effective union opposition, the State embarked upon a pro-business path, characterized more by laissez-faire policies than active promotion of industrial development. In the economy, the expansion of low-wage, labor-intensive, geographically dispersed industry gained momentum.

In the second period, the 1950's, an era of growth in both the economy and the State apparatus itself culminated in the governorship of

Luther Hodges, who launched North Carolina on a pattern of diversified economic growth through aggressive, State-led industrial policies. Based on the recruitment of outside industry and educational programs, Hodges's initiatives transformed the State's long-running pro-business approach into a more activist stance. Perpetuating the exclusion of the labor movement from political power, Hodges also pioneered the direct involvement of business leaders in policy-making and strengthened the "progressive" orientation of governmental and corporate officials. While growth continued in traditional sectors, the state's economy began to diversify and become more dependent on the relocation of branch plants from outside firms.

The third period is the focus of this essay, the turn to high technology under Governor Jim Hunt, who served from 1977 to 1985. In this chapter, I will consider only the background to these events, a time marked by great shifts in the state's political economy in the sixties and early seventies. The growth of new industries and the decline of traditional ones created the basis for a "two-track economy," a split that ultimately led to political division within the business community between pro-modernization and traditionalist forces. Despite these changes and those associated with the civil rights movement and the growth of the Republican Party, the contours of top-down industrial policy remained remarkably constant, oriented towards State-led recruitment and education. Business strengthened its privileged role in policy-making while labor remained on the outside.

I will argue in the next chapter that the political and economic environment growing out of these trends served as the foundation for the high-technology initiatives of the 1980's. Together, the patterns constituted a framework from which top-down strategies of industrial policies consistently emerged. An examination of the historical origins of

this framework makes an understanding of the high-tech eighties possible.

Industrialization and "the dawn of a new era": 1880-1900

The period of industrialization is an important one in the political economy in any society. In North Carolina, rapid economic growth from 1880 to 1900 coincided with political turbulence, as populists challenged the dominant Democratic Party. Emerging from the fray with renewed strength, the Democrats set in motion political patterns of top-down economic development that would last half-a-century. With the partisan opposition marginalized and potential enemies like the labor movement weak, the Democrats followed staunchly pro-business policies by keeping taxes, regulations, and unionization rates low. These "laissez-faire" approaches were supplemented by one example of more activist State power, a program of educational improvement. An emergent ideology of "progressivism" justified the pro-business State on the grounds that all would benefit from the spread of industry. The policies indeed helped set the stage for continued dispersed industrialization, but it occurred primarily in low-wage, labor-intensive industry characterized by dismal conditions for labor. This section sets forth the essential developments that gave rise to these patterns.

After the Civil War, the crisis in the state's predominantly agricultural economy helped spur industrialization in at least two ways.¹ First, falling farm profits created an incentive for those with resources to diversify out of agriculture. Furthermore, industries like textiles helped sustain demand for agricultural products directly, giving planters further incentive to invest in manufacturing.² And for those outside of the planter

¹ On pre-war industrialization see Powell (1989): 315-7; Lefler and Newsome (1973): Chapter 26; Billings (1979): 4-5. On the agricultural crisis see Lefler and Newsome (1973): Chapter 36. On general financial problems, see Gatton (1987): 54-8; Mitchell (1954): 57-8, 67-9.

² Powell (1989): 407; Wood (1986): 31; Billings (1979): 69.

class with funds to commit, the faltering farm economy made the new industries even more attractive. Second, agricultural crisis created a potential labor force for new industry as many families could no longer rely on farm income to support themselves. New manufacturing enterprises provided an alternative source of employment for impoverished farm workers.³

These ties to the state's agricultural past ensured that even as great changes occurred in the economy, significant elements of continuity remained.⁴ The transformation, however, was dramatic. From 1870 to 1880, the value of manufacturing production increased only 5.6%. From 1880 to 1890, it went up over 100% and then another 135% in the next decade.⁵ The number of textile mills increased four times; their employees nine times; the value of their products eleven times, and their capitalization twelve times from 1880 to 1900.⁶ The entire United States was in the midst of rapid economic growth through this period. But in the 1890's, investment in North Carolina's textile industry rose 205%, compared with 32% for America as a whole.⁷

In politics, the conservative Democratic Party, allied with planter interests and emergent industrial leaders, faced a severe challenge from populists in the 1890's as disenchanting farmers, workers, blacks, and Republicans joined hands in a campaign known as the Fusion movement.

³ Lefler and Newsome (1973): 509, 512; Collins (1957): 387; Brown (1985): 36, 53, 59; Wood (1986): 22-31.

⁴ Southern historians debate whether industrialization was led by a "new class" of industrialists or by representatives of the old planter aristocracy. C. Vann Woodward (1971) is the chief exponent of the first view. Dwight Billings (1979) offers the opposing perspective in his book on North Carolina, drawing support from W.J. Cash (1941) and J. Carlyle Sitterson (1957). The evidence seems to indicate that despite the presence of some so-called "new men" in the ranks of early industrialists, planters and their families were responsible for a great deal of investment in manufacturing. However, even if a "new class" did industrialize North Carolina, the basic theme of continuity within change remains intact. The state's emergent industrial sector was still tied to the agricultural past in the ways indicated above, if not through direct continuity of elite control.

⁵ Mitchell (1954): 72.

⁶ Lefler and Newsome (1973): 508-9.

⁷ Brown (1985): 50.

Tied to the national Populist campaign, the insurgents demanded railroad regulation, easier credit and currency reform, higher prices for farm produce, labor legislation, more funds for public education, and electoral reform. In 1894 and 1896, populists won majorities in both houses of the state legislature and the election of a Republican governor. They instituted a degree of local self-government, enacted fairer election laws, limited the legal interest rate to 6%, raised business taxes to pay for increased school funding, and increased political participation and office-holding by black citizens.⁸

The Democratic Party's 1898 backlash attacked the Fusionists' racial and economic programs.⁹ Democrats played on fears of "Negro rule" to woo whites away from the populists, and so-called "Red Shirts" stalked polling places to intimidate black voters. But the elite was also worried by the Fusionists' economic populism. Industrial capitalists played a large role in the election, providing financial support to candidates and allowing workers time off to attend Democratic rallies. The Democrats swept to victory in 1898 and solidified their triumph in 1900 in two ways. First, they regained control of the governorship with the election of Charles Brantley Aycock. Second, they secured passage of a constitutional amendment disfranchising illiterate voters. The rule targeted and fell most heavily upon blacks: many whites were exempted under a "grandfather clause" that gave the vote to people whose grandfathers had had it. With the black vote disqualified and many whites won over to the Democrats, the Fusion challenge effectively ended.

The events at the end of the century inaugurated a new era in

⁸ For a variety of perspectives on the Fusionist challenge and time in power, see Lefler and Newsome (1973): 545-9 and Chapter 39; Powell (1989): 424-32; Billings (1979): Chapter 7; and Wood (1986): 111-8.

⁹ See Lefler and Newsome (1973): 555-8; Powell (1989): 433-36; Billings (1979): 188-90.

politics characterized by Democratic dominance, pro-business State policies, and an emergent ideology of "progressivism." Democrats enjoyed virtual one-party rule for decades: Republicans elected no governor, no State officer, no U.S. Senator, and only three U.S. Representatives from 1900 to 1920, and both houses of the General Assembly remained under overwhelming Democratic control.¹⁰ Within the party, "machines" controlled affairs for the first half of the century, facing persistent but ineffectual challenges.¹¹ Extensive disfranchisement and depoliticization made this rule by the elite possible. The suffrage amendment knocked 50,000 off of the voting rolls.¹² And in the 1904 governor's election, only 50% of this shrunken electorate turned out to vote, compared with 86% of the larger pool in 1896.¹³

The practical result of this grip on power by the elite was the emergence of an unreservedly pro-business State through the first decades of the twentieth century.¹⁴ The State held taxes and regulations to a minimum and intervened frequently to stanch out union militancy.¹⁵ The rural-controlled legislature's continued opposition to most State expenditures limited State action to laissez-faire measures rather than active support for industrial development; for example, responsibility for roads was left to the county authorities through the first two decades after 1900.¹⁶ The one exception was public education, for which the State began to take extensive responsibility in 1901 when the legislature doubled appropriations for schools under Governor Aycock, "The Education Governor." State leaders had mixed motives for enacting the plan:

¹⁰ Lefler and Newsome (1973): 563.

¹¹ Key (1949): 211-15.

¹² Lefler and Newsome (1973): 562.

¹³ Luebke (1990): 7. See also Wood (1986): 119-22.

¹⁴ Key (1949): 211; Brown (1985): 54.

¹⁵ Lefler and Newsome (1973): 513, 516.

¹⁶ Wood (1986): 125; Brown (1985): 45-7.

educational improvements were partly an adoption of the populists' concern with education, partly a mechanism to ensure that whites did not fall prey to the suffrage amendment's disfranchisement, and partly a "solution" to racial problems (since education was to be offered to blacks as well as whites).¹⁷ But State involvement in education was also motivated by a recognition of the need for a trained work force, as Aycock's speeches indicate.¹⁸ Education funding can thus be seen as a precursor to the more activist state that would emerge over the course of the half-century.

Business hegemony was not due to the existence of strong employer organizations, but rather to the more direct elite control of the Democratic Party and thus of the reins of governmental power.¹⁹ As V.O. Key remarked in 1949, "Industrialization has created a financial and business elite whose influence prevails in the state's political and economic life. . . . For half a century, an economic oligarchy has held sway."²⁰ From labor, capital faced little political challenge, since the groundwork for the exclusion of labor from power both on the shopfloor and in politics was laid early in the state's industrial history.²¹ Analysts explain labor's weakness on the basis of a variety of factors: the concentration of the state's economy in low-wage, labor-intensive industry, the geographical dispersion of industrialization, the paternalistic system of labor control and the consequent direct dependence of workers on employers, the harsh tactics used by employers to break strikes, the willingness of the State to

¹⁷ See Connor and Poe (1912): 226-7, 255-9.

¹⁸ Quoted in Connor and Poe (1912): 126.

¹⁹ Lefler and Newsome (1973): 562-3; Powell (1989): 439.

²⁰ Key (1949): 211. Business associations did emerge in response to populist threats: the North Carolina Bankers Association, founded in 1897 at the height of Fusionist power, is a case in point. (Gatton [1987]: 2-3, 15).

²¹ For discussions of labor's weakness in North Carolina, see Lefler and Newsome (1973): 514-5, 583-4; Billings (1979): 109-13; Wood (1986); and Powell (1989): 454. Wood (1986) contains accounts of labor history in the period (especially pages 53-8, 71-2, and 85-92).

back capital in industrial disputes, and the division of the work force along racial lines.

A final political pattern was an emergent ideology of "progressivism" among the state's political and business elite. From its early origins, post-bellum industrialization took on the aura of a crusade, a campaign for the advancement of all North Carolinians. Mills would be a panacea for all of the state's ills, the basis of "a moral and material revolution," and a way of redeeming the state's image.²² Three features of this early North Carolina progressivism are important to point out. First, the state's image of progressivism became an end in itself, in addition to the "material and moral" gains associated with modernization. Second, the ideology of progress was dualistic in nature. On one hand are the qualities stressed by traditional historians of the state: a commitment to education, "civic responsibility," industrial progress, and uncorrupt government.²³ On the other hand, the same "progressives" promoted the white supremacy campaign of 1898, the disfranchisement of blacks, and opposition to unions.²⁴ Finally, North Carolina's progressivism was based on what Dwight Billings calls "modernization from above."²⁵ Leaders valued progress, but only within the framework of direction by the elite. V.O. Key concluded that the state was led by a "progressive plutocracy": "Progressive, forward-looking, yes, but always sound, always the kind of government liked by the big investor, the big employer. While investors and employers have been willing to be reasonable, they have aimed to keep

²² Collins (1957): 370-1. See also Griffin (1964): 36-8, 41; Lefler and Newsome (1973): 504.

²³ See Lefler and Newsome (1973): Chapter 40, "The Dawn of a New Era"; Key (1949): 205-10.

²⁴ Aycock called for both an "educational awakening that will reach every son and daughter of North Carolina" and declared "the God-given and hereditary superiority of the white man." Connor and Poe (1912): 226-7, 221.

²⁵ Billings (1979): 96, following Barrington Moore.

control."²⁶ So industrial progress was to be spurred by a narrow elite of top business and Democratic Party officials to the exclusion of labor and dissident politicians. But by stressing the transformative potential of industrial progress and promoting universal education, progressives justified their approach on the grounds that benefits would filter down to the mass of the population.

At the same time, a number of significant patterns in the economy were in motion that would shape the state's development for many years. Four main trends are worth noting. First, economic activity was concentrated in textiles, tobacco, and furniture. All three were tied to the state's agricultural past through their direct links to primary production and their reliance on low-wage workers with one foot in agricultural employment. Second, this period saw the beginnings of industrial relocation from the North to the South. Through the 1930's North Carolina industry generated most of its financing inside the state, but there was already a notable movement of Northern capital southward in the 1890's.²⁷ As early as the 1870's, North Carolina was advertising itself to Northern investors, and firms were attracted by the state's low wages, lack of union activity, and pro-business State.²⁸ Third, industry followed a pattern of geographical dispersion, again to take advantage of agricultural labor and raw materials in rural areas.²⁹ But production began to concentrate in the central area of the state, called "the Piedmont," planting the seeds of regional inequality that would intensify over the years.³⁰ Finally, labor faced harsh conditions in the mills proliferating in state. In a paternalistic system of labor control that in many ways resembled

²⁶ Key (1949): 214.

²⁷ Lefler and Newsome (1973): 509; Collins (1957): 373-7; Brown (1985): 33-4.

²⁸ Collins (1957): 378-82; Wood (1986) 12-3, Chapter 3.

²⁹ Connor (1965): 446; Powell (1989): 414.

³⁰ Mitchell (1954): 217. By 1929, four-fifths of textile mills, one-half of tobacco production, and nearly all furniture factories were in the Piedmont.

systems of agricultural labor, industrialists hired entire families, who then lived in "mill villages." Low wages, long-hours, intense and often violent resistance to unionization, and dismal health and safety conditions were the norm.³¹

Together, these patterns constituted the roots of North Carolina's top-down approach to industrial policy. Procedurally, the one-party, pro-business State and the ideology of modernization from above underpinned a drive for industrial progress led by an elite. Substantively, policies supported the rapid accumulation of capital, justified by the promise that benefits would ultimately reach the state's workers and outlying areas. But already, trends in industrial geography and labor conditions were beginning to indicate that the advantages of growth would not "filter down" as smoothly as the progressives' rhetoric claimed.

The State, the economy and modernization in the 1950's

The second period of change came during the 1950's under the governorship of Luther Hodges, who carried top-down industrial policies to innovative new heights. In office from 1954 to 1961, Hodges launched the State on a course of more active support of diversified industrial development, emphasizing both the recruitment of outside firms and programs linked to education and research. Continuing the pattern of excluding labor from power, Hodges brought corporate leaders directly into policy-making through a series of institutions linking government, business, and universities. These new initiatives and structures strengthened the elite's ideology of "progressivism," harnessing its ideas in support of aggressive State action. This section first describes the background to Hodges's governorship, a period of rapid industrialization

³¹ Wood (1986): 39-48; Brown (1985): 51-3; Billings (1979): 100-4.

coupled with efforts to rationalize and strengthen the State in the twenties and thirties. Then it relates Hodges's own innovations and the significant patterns that emerged from this time of change.

Economic expansion continued along the lines of patterns from early industrialization. By mid-century, textile firms accounted for more employment than all other industries combined, and along with furniture and tobacco, constituted 75% of the state's wealth.³² Growth also occurred in newer sectors of the economy like utilities and banking that profited from the general prosperity of expansion.³³ Northern firms' relocation to the South accelerated as companies attempted to escape the North's rising wages, regulations, and unionization and take advantage of the South's continued availability of formerly agricultural labor and favorable State policies.³⁴ The Great Depression wreaked havoc on North Carolina's economy but did not result in any major changes in the direction of its development.³⁵ After the crisis and World War II, growth continued along the same trajectory. Agricultural mechanization sent thousands of laborers looking for factory work, extending the existence of an ample supply of labor for industry.³⁶ And growth in textiles continued, though the industry became more concentrated in fewer firms and experienced its first threats from Japanese import competition.³⁷

While these changes were important ones for North Carolina, the direction of economic policy was more influenced by changes within the State itself over the course of the half-century. From 1920 onwards, political leaders undertook a slow process of rationalizing the State

³² Hobbs (1958): 102; Brown (1985): 63.

³³ Mitchell (1954): 233, 264; Brown (1985): 60, 63; Gatton (1987): 119.

³⁴ See Wood (1986): Chapter 3.

³⁵ See Lefler and Newsome (1973): Chapters 43 and 44; Brown (1985): 65-7; Powell (1989): Chapter 24.

³⁶ Wright (1986): 241-9; Roland (1976): 21-5.

³⁷ Wood (1986): 173; Brown (1985): 73. Textile Bulletin (July 1955): 84.

apparatus into an organization more able and willing to act positively for industrial development. From 1921 to 1933, Governors Cameron Morrison, Angus McLean, and O. Max Gardner led North Carolina to create a Department of Conservation and Development and a Division of Commerce and Industry within it, assume supervision over some local infrastructural projects, educational functions and credit, reorganize administrative departments to strengthen the hand of the governor, and become the first state to centralize all road administration at the State level.³⁸

These new practices signaled an increasing willingness on the part of the State to assist industrial development directly. At the same time, its more traditional pro-business policies persisted. Taxes stayed low, and when they did increase, regressive ones like sales taxes were the norm. Regulations, too, remained minimal. And when the State did intervene in the industrial conflicts of 1921, 1929, and 1934, it did so on behalf of capital, often sending in the state militia.³⁹ The new, more activist side of the State, however, was significant in two ways. First, the State itself became an institutionalized force, wielding power in politics. V.O. Key goes as far as to say that the "Shelby Dynasty," dominant in North Carolina politics from 1928 to 1948, found its central base within the ranks of the new administrative corps.⁴⁰ The State for the first time took on the characteristics of a bureaucracy with interests of its own: a commitment to industrial growth and an increasing role for the State in that expansion. Second, these early additions to the State's apparatus established the groundwork for more aggressive and wide-ranging

³⁸ On Morrison see Lefler and Newsome (1973): 600-3; Powell (1989): 471-2. On McLean see Lefler and Newsome (1973): 603-5; Powell (1989): 472-7. On Gardner see Hobbs (1958): 183; Powell (1989): 482-5; Lefler and Newsome (1973): 605-9; Rankin (1955): 103-4; Wood (1986): 127-33.

³⁹ Luebke (1990): 12-14.

⁴⁰ Key (1949): 213.

activism in the future. The crucial factor was increased centralization of responsibility at the state level: by the mid-fifties, only Florida rivalled North Carolina's concentration of power at the center.⁴¹ But until the governorship of Luther Hodges, the full weight of this increasingly strong administration was not mobilized in full support of economic development.⁴²

It was under Luther Hodges, propelled into the governor's office by the death of his predecessor and then elected in his own right for another four years, that these trends converged to produce new departures in policy. In office from 1954 to 1961, Hodges embarked on a program of aggressive State promotion of industrial development, aimed at diversifying the economy through the recruitment and expansion of advanced manufacturing plants. Before describing these initiatives, however, it is important to understand the economic and political pressures for these departures. Though Hodges was himself a former textile executive, he recognized the attractiveness of expanding the state's industrial mix to provide a cushion against statewide economic dislocation as the influx of imports began to endanger sectors like textiles.⁴³ Ten years earlier, diversification had been just an academic idea; now economic forces made it appear a practical necessity. In addition, rising income would boost further industrial development through multiplier

⁴¹ Rankin (1955): 103; Hobbs (1958): 186.

⁴² There were some nudges for an increased state role. Academics at the University of North Carolina began to prod the State to take more of an active role in diversifying the economy away from textiles, etc. (see Herring [1940], Vance [1932 and 1935], and Odum [1936]) In 1935, a State Planning Board was formed to explore such a role, but the Board never gained the institutional position necessary to reshape the State. On the Board see Johnson and Johnson (1980):181; Rankin (1955): 325; Wood (1986); 158; Grisette (1943); Herring (1945); N.C. State Planning Board (1937 and 1944).

⁴³ See Hodges's autobiography (1962: Chapter 2) and his papers (1960: 474-5) for statements of the rationale for diversified economic development. See also N.C. Department of Conservation and Development (1957a). In 1955, the Federal Government halved the import duty on Japanese textiles, opening the floodgates further.

effects.⁴⁴

There were also political forces that made a push for diversification feasible in the mid-fifties where it had not been before. First, a growing constituency within the business community began to see general industrial growth as an important goal of State policy. Sectors like banking and power companies were on the rise, and they profited when the rest of the state was prospering.⁴⁵ Furthermore, the wider business community saw industrial growth as a way to boost tax revenues necessary to provide public services (like highways) without raising tax rates. In 1943 business leaders founded the North Carolina Citizens Association, which became the chief business organization and was committed to this kind of diversified expansion.⁴⁶ And older sectors like textiles were willing to accept a push for general growth as long as it meant the continuation of low taxes and anti-unionism by the State. Their main political concern was national-level controls on imports.⁴⁷

Inside the State, too, there were forces for an expanded State role aimed at boosting industrial growth. In the first place, years of rationalization and strengthening the State's apparatus had created the basis for a more activist State. Bureaucracies created in the twenties, thirties, and forties were poised to play an increasing role in North Carolina's economic life. Second, the need to support the State's expanding activities with tax revenues took on a life of its own. Maintaining State functions became an explicit goal of politicians like Hodges, and overall growth in

⁴⁴ See Hodges (1962a): 161-8.

⁴⁵ Bank support for some of Hodges's main policies is apparent in Tar Heel Banker (June 1955 and June 1957), for example. See also Gatton (1987): 94.

⁴⁶ See the organization's magazine, We the People of North Carolina (September 1954): 14-5, 27; (June 1956); (September 1956); and (May 1957): 11, 17.

⁴⁷ We the People of North Carolina (May 1959). Textile firms lobbied the state government to advocate for import restrictions at the federal level. (Textile Bulletin [November 1958]: 24) Older industries did express some wariness that an influx of new industries would disrupt existing social relations. See Textile Bulletin (September 1955): 62.

the tax base was the most politically feasible way of attaining the needed revenues.⁴⁸

Finally, just as early industrialization was part of a vision of progress held by the state's elite, diversification became a watchword of pro-modernization politicians and business leaders in the fifties. To propel North Carolina into the modern industrial age, the State needed to foster not just any development, but expansion in the more advanced sectors of the economy. That was where growth was occurring elsewhere in the country, and North Carolina would not be left behind. Furthermore, expanding into new, higher-paying capital-intensive manufacturing sectors offered a way to increase the state's notoriously low per capita income without challenging the low-wage basis of existing industries. To that extent, growth through diversification represented a classic top-down strategy: it would spread benefits through a process of filtering down rather than redistribution.

Responding to these pressures, Hodges built up an activist apparatus for State-led economic development based on industrial recruitment. He beefed up industry-hunting programs, established the Research Triangle Park to spur science-based industry, and improved the availability of industrial training and finance. As I have noted, the State had long been advertising for Northern firms to locate new plants in North Carolina. And the state's relatively late industrialization made the importation of ready-made industrial investments very attractive. But Hodges elevated the strategy of recruitment to entirely new heights, travelling 67,000 miles in 1959 alone seeking new industry, advertising the state's "good business climate," "modern" tax structure, low-wage, non-union and "native born" labor, "low number of days lost to work stoppages," and "cooperative

⁴⁸ See Hodges (1962a): 32; N.C. Department of Conservation and Development (1957b).

communities."⁴⁹ "Hodges's Raiders" took high-profile trips to New York, Chicago, Philadelphia, and Europe. His administration reworked the tax system so that out-of-state companies were only levied for profits attributable directly to business transacted in North Carolina.⁵⁰ And Hodges strengthened the Department of Conservation and Development, building a staff with a specific responsibility for wide-spread industry-hunting. Local authorities were also critical links in the chain. County-level "industrial commissions," local officials, and private "local development corporations" provided information, services, and capital for potential recruits. State-level officials actively encouraged these forms of local discretion, regarding them as crucial complements to their activities.⁵¹

Another significant advance under Hodges was the creation of the Research Triangle Park (RTP), a wooded piece of land situated between Raleigh and Durham and approximately equidistant from the state's three major research universities: Duke University, the University of North Carolina, and North Carolina State University.⁵² A 1955 study initiated by Hodges eventually led to the creation in 1958 of a non-profit corporation to sell the land to firms and laboratories for research activities and experimental production, and to establish a Research Triangle Institute as an "anchor" for the venture. By providing access to the nearby universities and maintaining the aesthetic value of the Park, promoters hoped to recruit R&D facilities nationwide to settle in North Carolina.⁵³ The benefits would then spin-off to the state as a whole, following

⁴⁹ Roland (1976): 12. For examples of advertisements see N.C. Department of Conservation and Development (1957a and 1957b), Cobb (1982): 98-100.

⁵⁰ Lefler and Newsome (1973): 609; Hodges (1962a): 43-7.

⁵¹ Hodges (1962a): 42, 76-7; Wood (1986): 164-5; Bartlett (1970): 19-31.

⁵² For more complete accounts of the history of the Park, see Hamilton (1966), Raleigh News and Observer and Raleigh Times (1979), Hodges (1962a): Chapter 9, McDowell (1981), Vogel and Larson (1985), Rogoff (1986), and Franco (1985).

⁵³ Little (1989): 5

Hodges's maxim: "Where there is research, there is industry."⁵⁴ Though the State did not administer the Park, Hodges's support made it possible for the idea to be taken off the drawing board and into practice.

Hodges also set up a program of customized industrial education through the State's new community college system, providing made-to-order job training to enterprises planning to create new jobs.⁵⁵ And he helped establish the private Business Development Corporation of North Carolina (NCBDC) to provide equity financing to firms that failed to secure regular bank loans. As in the case of the RTP, it was not through funding but through leadership that Hodges and the State were instrumental in the founding and success of the NCBDC.⁵⁶ Though the effect of all these programs is difficult to quantify, Hodges presided over a period of considerable economic expansion in the state. Industrial investment totalled \$244 million in fiscal year 1957-58, and \$247.4 and \$256.5 million in the subsequent two years.

By the 1960's, North Carolina had the largest number of State employees per capita, organized into an activist State apparatus able to intervene forcefully in the economy.⁵⁷ The focal point of State power was the governor, constitutionally weak, but strong through tradition and through the build-up of the institutional structure of the executive since 1920.⁵⁸ And two pillars of State intervention became central: the commitment to extensive recruitment of outside industry, and the focus on research and education as a way to spur economic development.

In addition to extending State power, Hodges helped invigorate the political activity of the business community. The North Carolina Citizens

⁵⁴ Hodges (1962a): 223. On spreading the benefits, see Hodges (1962b): 426.

⁵⁵ Hodges (1962a): 186-97.

⁵⁶ Floyd (1962): 29-31; Blaine and Gentry (1964): 15-16; Hodges (1962b): 232-3; Business Development Corporation of N.C. (1956-80).

⁵⁷ Lefler and Newsome (1973): 682.

⁵⁸ Peirce (1975): 140-1; Bass and DeVries (1976): 228-9.

Association (NCCA) had grown into its own by the fifties. The NCCA supported the basic menu of pro-business policies like low taxes, loose regulations, and anti-unionism, but also plugged for the State to take a role in industrial development. But increasingly, the involvement of the business community in policy-making did not take place through organizations like the NCCA. Instead, its most important institutional participation came through a variety of bodies linking different combinations of business, academic, and State officials in public projects. The Research Triangle was the primary example: leaders from all three spheres played a major role in its genesis and success and still have institutional roles in its current administration. In addition, Hodges brought top executives directly into policy-making, forming a board of corporate leaders to advise the Department of Conservation and Development. The State's public universities were also the site of this kind of high-level cooperation. For example, in 1949 over two hundred business leaders formed the Business Foundation to assist the University of North Carolina's School of Commerce.⁵⁹

As capital became involved in public affairs in these ways, labor remained on the outside. Labor's weakness became self-perpetuating: since unions represented so few workers, they could hardly be a viable partner in high-level political negotiations. In addition, the enshrinement of recruitment as the central State strategy was a further setback for unions, since it gave policy-makers even more of a stake in blocking union organization to attract clients. Empowered by the federal Taft-Hartley Act, the State passed a "right-to-work" law in 1947, banning the closed shop and compulsory dues check-offs. And labor faced continual defeats in particular industrial disputes. Confronted with a protracted strike at

⁵⁹ Business Foundation of North Carolina (1949).

Harriet-Henderson Yarns in 1958-59, Hodges effectively helped break the strike by sending in the National Guard and the Highway Patrol to protect strike-breakers.⁶⁰

As in the early part of the century, an ideology of progress was prominent among North Carolina's political and business elite, given new life and new focus under the leadership of Luther Hodges. North Carolina's image as a forward-looking state was still an important objective in itself. One of Hodges's goals for the Research Triangle was to "focus attention on North Carolina and enhance our established reputation as a progressive state."⁶¹ Progressivism's more substantive aims obligated business to act in the public interest, fostering an ethic of public service among the state's business leaders. But the "public interest" was almost always seen as the equivalent of business interests, and corporate officials were the appropriate leaders of civic projects.⁶² Progressives favored boosting the state's per capita income, but not through redistributive schemes, and especially not through unionism. That unionism was an anathema to growth became a crucial tenet of the elite's political creed.⁶³ Instead, progressive leaders relied on diversification of the economy into higher-wage sectors and improved education to raise income levels. So modernization retained the dualistic character it had assumed at the start of the 1900's, so much so that Hodges called North Carolina a "conservative-progressive state" in his autobiography.⁶⁴

Four significant economic patterns emerged out of this period of change, closely related to the trends set in motion early in the state's industrialization. First, the reliance on the state's traditional industries

⁶⁰ Wood (1986): 159-61; Hodges (1962a): Chapter 10.

⁶¹ Hodges (1963): 362.

⁶² On the equation of business and public interest, see We the People of North Carolina (October 1943, February 1944, March 1982: 32).

⁶³ Cobb (1984): 97.

⁶⁴ Hodges (1962a): 62.

began to weaken. As international competition started to threaten textiles and other sectors, the policy of recruitment and general trends in the national economy began to bring plants to the state in industries like food processing, electronics, and chemicals.⁶⁵ Still, at the end of the fifties, 55% of North Carolina's manufacturing employment was in the textile industry. The second pattern is closely tied to the first. As diversification became both a goal of policy and an economic trend, the health of North Carolina's economy became inextricably linked to the willingness of national firms to locate branch plants in the state. Third, North Carolina's pattern of limited dispersion persisted. While branch plants continued to set up shop in all parts of the state, 61% of new plants chose the Piedmont area from 1954 to 1962, and in 1961 nine of the top ten industrial cities were located there. Finally, though workers saw some gains in income from growth and diversification, North Carolina's average manufacturing wages remained low. Since the State advertised North Carolina's low pay to potential recruits, many of the capital-intensive plants that did come to the state paid wages at the low end of their scales.⁶⁶

So through an era of change, North Carolina's top-down approach to industrial development gained new political and institutional momentum. Hodges boosted the role of the activist State, invited business into the halls of government while leaving labor outside, and extended North Carolina's progressivism. The policies emerging from this framework followed the logic that aiding industry would spread advantages to all of the state's citizens. But while industry grew at a rapid

⁶⁵ Employment climbed 108% in non-electrical machinery and 203.6% in fabricated metals from 1950 to 1960. (Lefler and Newsome [1973]: 691) Bank branches doubled from 1950 to 1961 while becoming concentrated in fewer banks as a result of mergers. By the late fifties, Wachovia and First Union had joined the nation's top ranks. (Donsky [1988]: 24-30; Gatton [1987]: 95, 119; Brown [1985]: 77); power companies like CP&L underwent major expansions in the fifties as well. (Brown [1985]: 184).

⁶⁶ Wood (1986): 178-9.

pace, patterns of regional and socio-economic inequality persisted.

The politics of industrial growth and decline: 1961-76

During the sixties and seventies, the patterns set in motion in the fifties matured, but the period was not one of stagnation. Economic changes gave rise to a "two-track economy" that shaped the politics of the business community, resulting in a split between growth-oriented "modernizers" and more traditional factions. On the one hand, the Sunbelt boom resulted in remarkable growth for parts of North Carolina's economy; on the other, the globalization of the economy threatened the stability of the state's traditional industries like textiles. As the seventies wore on, the two tracks diverged politically as well as economically.

More explosive events in politics surrounded the black struggle against segregation and racism. Blacks entered the electorate on a greater scale, and white "flight" from the Democrats sowed the seeds for the emergence of a viable Republican Party in the state. In combination with other trends, like the urbanization of the population in the wake of industrial growth, civil rights helped reshape politics in North Carolina.

But as the trends of the sixties and seventies made their mark on North Carolina, they had to filter through the pre-existing framework that reproduced patterns of top-down industrial policy. So the State extended its commitment to pro-business industrial development through recruitment and educational improvement. The weakness of unions persisted, despite some victories for the labor movement in the seventies. And even after the considerable diversification of the Sunbelt boom, the state's economy remained tied to low-wage industry and the relocation of branch plants. This section will trace these manifestations of continuity and change, which together made up the political and economic environment faced by policy-makers at the end of the seventies.

In the sixties and seventies, the United States' industrial growth underwent dramatic shifts.⁶⁷ Two developments in particular had profound consequences for southern states like North Carolina. The "Sunbelt phenomenon" brought breathtaking growth in newer sectors of the economy; the "globalization" of the economy threatened more traditional industries with an influx of low-cost imports. In the entire postwar period, but especially in the seventies, the southern Sunbelt experienced phenomenal growth, gaining 2.9 million in population from 1970 to 1976.⁶⁸ Plants from the North relocated their operations in Southern states and new industries sprung up in the Sunbelt's emergent population centers. The Northeast claimed 70% of the U.S.'s value added in the 1940's, but its share had already dropped to 51% by 1971. And the shift was only beginning. From 1970-1975, every industry except mining grew faster in the South than in the nation as a whole as 75% of the Fortune 500's new plants were built outside the country's former "core manufacturing region" in the 1970's. North Carolina shared fully in this boom. In the period 1966 to 1976, only two states -- California and Texas -- added more manufacturing jobs. From 1955 to 1977, North Carolina's manufacturing employment increased 76.1%, compared with 25.2% for the United States as a whole.⁶⁹

Analysts of the Sunbelt phenomenon point to a host of factors that spurred this geographical shift, including the South's climate, its abundance of raw materials, the growing importance of road transportation, the emergence of oil as the fundamental source of energy,

⁶⁷ For discussions of the changes from a wide variety of ideological perspectives, see, for example, Piore and Sabel (1984), Thurow (1980), Bluestone and Harrison (1982), Bowles, Gordon and Weiskopf (1983).

⁶⁸ Cobb (1982): Chapters 7-8; Weinstein and Firestone (1978); Haveman et. al. (1976); *Business Week* (1976).

⁶⁹ Roland (1976): 17; Sale (1975): 8; Heckman and Greenstein (1985): 149; Luebke (1990): 62; Weinstein and Firestone (1978): 16-7.

and a southward bias in federal defense spending. But most accounts place heavy emphasis on the South's "business climate": a combination of low wages, low rates of unionization, and a favorable attitude on the part of government towards business, reflected in low taxes, weak regulations, and a willingness to supply infrastructure. Though industry moved south for reasons that lay outside of policy, recruitment efforts helped determine which southern communities received the most investment. And the "business climate" so often pointed to as a causal factor in the Sunbelt boom was partially a result of State policies aimed at recruiting: low taxes, minimal regulations, and hostility to unions. So even if recruitment did not itself "cause" the migration and growth of the seventies, the associated policies were at least part of a wider set of attractions that spurred relocation. Another critical force was the remarkable growth of the so-called "service industries," which because of their newness were not tied to the industrial Northeast, attracted instead by the amenities of the Sunbelt.⁷⁰

The consequences of this movement of people and capital for the South and North Carolina were profound. One critical result was further diversification in North Carolina's economy, a long-sought-after goal of State policy. The textile industry's share of the state's manufacturing employment dropped from 55.1% in 1947 to 30.8% in 1978; tobacco's from 8.2% to 2.7%. By contrast, from 1972-1977 the value added by manufacturing increased 217% in fabricated metal, doubled in rubber and plastic, paper, and electrical machinery and equipment, and rose 82% in chemicals. At the same time, hundreds of thousands remained employed in traditional industries, and some such as apparel increased their share of the state's employment during this time.⁷¹

⁷⁰ For accounts of the causes of the Sunbelt phenomenon, see Sale (1975): 18-20, 27; Cobb (1982): Chapter 8, 227; Weinstein and Firestone (1978): 23-42; Business Week (1976): 95-108; Bluestone and Harrison (1982): Chapter 6.

⁷¹ Wood (1986): 170-1 (Table 6.1), 169, 174, 177; Luebke (1985): 315.

Perhaps even more striking was the shift away from manufacturing to "tertiary sectors" of the economy.⁷² In the first half of the 1970's southern employment growth in retail trade was triple the northern figure, and in general service jobs, double. From 1970 to 1987, 80% of new jobs in North Carolina were created outside of manufacturing, with the largest gains coming in retail trade.⁷³ From 1965 to 1980, banks' resources increased five times and became increasingly concentrated in a few major institutions, such as NNCB, Wachovia, and First Union. Power companies experienced such rapid growth that by the mid-eighties, Duke Power was the eighth largest power company in the country.⁷⁴

One significant fact about Sunbelt growth was the uneven spread of its benefits. Capital-intensive plants paying higher-than-average wages gravitated to more urban counties, especially in the Piedmont region. Rural counties continued to attract the majority of factories, but they more often than not fell into low-wage categories, resulting in widening gaps between urban and rural counties in poverty, educational levels, and other measures of welfare.⁷⁵

Trends towards globalization exerted a second major effect on North Carolina's economy. After two decades of unchallenged leadership in the world economy, U. S. industries came under intensified pressure from competitors from the Pacific Rim and Europe. This new global dimension became evident in the breakdown of the Bretton Woods currency agreement in the early seventies, the Arab oil embargo of 1973, stagflation, and general economic instability. But perhaps its most direct manifestation in North Carolina was the tide of low-cost imports from

⁷² "Tertiary" here means non-agricultural and non-manufacturing industries.

⁷³ Cobb (1982): 203-4; Luebke (1990): 62, 65.

⁷⁴ Gatton (1987): 119; Luebke (1985): 317; Charlotte Observer (1985a): 15A.

⁷⁵ Luebke (1990): 62; Wood (1986): 179. On the urban-rural gap see Calhoun (1988); Rosenfeld, et. al. (1985 and 1989); MDC (1986); Commission on the Future of the South (1986a); Falk and Lyson (1988); Lyson (1989); Luebke (1990): 66-7.

developing countries, which threatened labor-intensive industries like textiles.⁷⁶ From 1964 to 1984, U.S. imports of fabric rose from 1.5 billion square yards to 7.4 billion. Imports accounted for 18% of America's textile market by the early eighties.⁷⁷ And North Carolina's reliance on industries like textiles made it particularly vulnerable to these pressures.

The textile industry's response was a massive program of modernization to upgrade production and cut costs by shedding workers. By the mid-seventies, firms had launched a ten-year, \$1.5-billion-a-year program of capital expenditure. In North Carolina alone, spending proceeded at a rate of \$400-\$500 million per year. From 1970 to 1984, a remarkable 80% of profits was plowed back into industrial improvements.⁷⁸ This period of investment allowed the industry to survive. But as a result of automation and cost-cutting, North Carolina's textiles employment was dropping severely by the late seventies. In 1970, 37% of the state's manufacturing employees worked in textile plants; in 1987, only 25% did. Between 1975 and 1983, North and South Carolina lost one quarter of their textile jobs. In 1980 alone, the industry laid off 4,622 of the state's workers; combined sackings in textiles and apparel totaled 81,000 for North Carolina from 1979 to 1984. And just as the benefits of the Sunbelt boom accrued to some areas more than others, the hardship associated with textile layoffs was also unevenly spread. Many of the same counties that were missed by high-wage Sunbelt growth also suffered from the contraction in traditional employment.⁷⁹

⁷⁶ Southern Technology Council (1989): 7-8; MDC (1986): 7; Charlotte Observer (1985b): 1A. The import threat was not as great for two other labor intensive sectors important to North Carolina's economy: the furniture and apparel industries.

⁷⁷ Brown (1985): 98.

⁷⁸ Dunn (1981): 27; Finger (1986a): 8-10; Wood (1986): 196; Seymour (1984): 10.

⁷⁹ Luebke (1990): 63; Charlotte Observer (1985a): 1A; Finger (1986a): 8-10; We the People of North Carolina (1984): 46.

The events of these two stories -- one about the Sunbelt boom and the other about the dislocation associated with globalization -- reflected an emergent dichotomy in North Carolina. By the middle of the seventies, North Carolina's was a "two-track economy" divided between growing capital-intensive manufacturing and tertiary sectors on one hand and the state's traditional industrial base on the other. The textile industry was about to experience a deep plunge in employment; furniture and apparel would hold their own but not grow. One consequence of this two-track development was economic. Different regions of the state faced divergent futures, as new growth concentrated in urban areas and along the Piedmont's interstate highway corridor.

But another consequence of this pattern was political. In his recent book on North Carolina politics, Paul Luebke argues that the state's elite in the seventies split into two camps, "modernizers" and "traditionalists."⁸⁰ Traditionalists and modernists shared a great deal of common political ground in the seventies, agreeing in their opposition to unionism, excessive public spending, significantly higher taxes, and burdensome environmental and consumer regulations.⁸¹ And both traditionalists and modernists supported the general strategy of industrial recruitment. But at a deeper level, a political division was evident.

For one part of the economy, the future lay in the continuation of rapid growth. Banks, utilities, other service industries and advanced manufacturing firms fell into this category. Luebke calls the leaders of these sectors "modernizers," attributing to them an ideology of growth that included a willingness to accept an activist government, higher taxes, and some forms of social change in the interests of economic expansion. For

⁸⁰ Luebke (1990): especially Chapter 2.

⁸¹ See, for example, *We the People of North Carolina* (November 1976, December 1976, February 1977, December 1977) for statements of business views on policy.

example, modernizers favored increasing average wages for workers through the recruitment of higher-paying industry (though not through unionization or redistribution.) Modernizers were heirs to the brand of "progressivism" that emerged in the forties and fifties, and in a sense to the whole tradition of top-down industrial development. For the other part of the economy, such as the textile industry, the essential task was the protection of earlier gains, and thus in policies that kept costs low, maintaining slim profit margins and freeing up cash for re-investment. Luebke refers to this group as "traditionalists" and describes an associated ideology rooted in resistance to activist government and forms of change that threatened existing social relations. Traditionalists were wary of the importation of higher-paying firms, fearing that general wage levels would rise as a result. They also concentrated their political attention on national issues, fighting for import restrictions.⁸²

This split was not clear-cut; it did not manifest itself in institutionalized, public factions within state politics. But the division represented distinct interests and ideological tendencies among the state's political and business elite. As the policy-makers of the late seventies considered new industrial policies, they could not simply take into account the "business position." Divergent economic fortunes had given rise to a new era in the politics of the business community.

The sixties and seventies were times of great changes in other areas of politics as well. But despite the civil rights movement, the rise of the Republican Party, and some victories for labor, the top-down processes and outcomes of State policy-making remained remarkably constant through the first half of the seventies. State-led industrial recruitment and

⁸² For example, see News and Observer (1978a): 2.

education remained the cornerstones of industrial policy, and labor remained an outsider in political affairs.

Significant transformations did mark the era. One set was in the electoral arena, where the civil rights movement increased the percentage of blacks eligible to vote in the state, solidified black support for Democratic candidates, and split whites in the state's dominant Democratic Party between hard-core segregationists and those who advocated a more evolutionary approach to racial issues.⁸³ This division was evident as those wary of racial change began a process of "white flight" from the Democrats to the Republicans, a phenomenon that was already underway at the national level but which started to affect state politics as well.⁸⁴

Demographic shifts changed the political profile of the state as economic growth accelerated urbanization so that by 1970, 60% of the population lived in the Piedmont region, which encompassed most of the state's urban areas.⁸⁵ The political power of metropolitan areas was also boosted by "reapportionment," the redrawing of district lines according to the 1970 census, although rural legislators continued to hold crucial legislative posts by virtue of seniority.⁸⁶ Arguably, the swelling numbers of the urban professional class provided further impetus to the growth of the Republican Party. In 1972, Republicans amassed unprecedented successes, electing the governor, a Senator (Jesse Helms) and fifty state legislators out of the body of 170.⁸⁷

Outside of the halls of government, organized labor scored a few

⁸³ This split might be regarded as part of the division between Luebke's modernizers and traditionalists. Modernizers favored at least token desegregation and evolutionary change in part to prevent social unrest and "backwardness" from detracting from the climate of growth. See Chafe (1981) and Wright (1986): 265-9.

⁸⁴ Luebke (1990): Chapter 10.

⁸⁵ Beyle (1975): 5; Peirce (1975): 145; Edsall and Williams (1972): 395-6; Bass and DeVries (1976): 223-4.

⁸⁶ Coble (1987): 36.

⁸⁷ Richard Nixon's landslide presidential victory certainly accounted for some of the Republican's success in 1972.

successes in the seventies, though their exclusion from political power remained firm. AFL-CIO leader Wilbur Hobby garnered 7% of the vote in the 1972 election for governor. Union lobbying helped push through an increased minimum wage in the 1973 General Assembly. The 1974 union victory at J.P Stevens was followed later in the seventies by a series of wins by the Teamsters union around Winston-Salem. And the efforts of the Carolina Black Lung Association, formed in 1974, eventually led to legislative changes on behalf of textile workers suffering from byssinosis. But despite these victories, labor continued to have trouble translating them into enduring power. After winning the ballot at Stevens in 1974, ACTWU had to spend seven years negotiating the contract as the company employed various tactics of resistance. The five Winston-Salem elections resulted in only two contracts in the end. And the state's right-to-work law and prohibition on public employees' unionization remained in force.⁸⁸

Furthermore, the peak business organization, the North Carolina Citizen's Association (NCCA), undertook a program of institutionalization in the seventies that enhanced its political potency. Through the 1950's and 1960's, the NCCA held such a place of prominence in policy-making that Governor Dan Moore called it a "fourth branch of government." But it was not until the seventies that the group began to institutionalize its political activity. NCCA hired its first full-time director of governmental affairs, began mailing weekly state legislative newsletters, and organized bi-annual "area meetings" and regular legislative conferences. And the group built institutional links with local chapters of the Chamber of Commerce as well as the national Chamber.⁸⁹

As the civil rights movement, the new successes of the Republican

⁸⁸ Bass and DeVries (1976): 239-41; Luebke (1990): 97-9.

⁸⁹ We the People of North Carolina (1979b).

Party, and the political activities of labor and business steered North Carolina's politics in somewhat new directions, the State's top-down economic development policies remained consistent. In fact, the economic changes of the sixties and seventies entrenched recruitment further as the primary strategy for development. In a sense, the Sunbelt boom "proved" that industrial recruitment was capable of reaping rewards for North Carolina's communities. And the troubles of the textile industry, especially the foreseeable drop in employment, convinced policy-makers further that diversification of the economy was a precondition for the health of the state. By the seventies, the strategy of recruitment was also politically embedded in two ways. First, attracting branch plants became a more and more institutionalized function of the State, as a large and sophisticated bureaucratic apparatus developed with a commitment to industry-hunting. Second, the importance of recruiting industry evolved into a dominant feature of the state's political life. Political leaders staked their futures on their ability to bring more industry to the state. Any disputes were over tactics, not the strategy as a whole.⁹⁰

The other chief pillar of State industrial policy, education, also endured as a central tenet of political belief, as governors boosted public schools, built up a network of community colleges, extended the State's customized job training program, and consolidated the university system into a more cohesive unit with a single Board of Governors.⁹¹ The primary cooperative effort between universities and the business community, the Research Triangle Park, also prospered, gaining momentum as IBM, Burroughs Wellcome, and major federal research facilities located within its boundaries. In short, the system of educational

⁹⁰ Stuart (1979): 17; see also McConnville and Shaw (1983): 24-5.

⁹¹ Terry Sanford (1961-65) introduced many of the most innovative programs. See Sanford (1966a): 27-76; (1966b): 349, 483, 594, 613.

institutions linked to the economic fortunes of the state retained its prominence throughout the period. And importantly, in all of these efforts the State continued to play the leading role, enlisting the support of participants like the business and academic communities but consistently initiating and directing the programs itself.

In the economy, too, elements of continuity survived the transformations of the sixties and seventies. The state remained the nation's most industrial, with 28.68% of the state's employees in manufacturing jobs even as late as 1989, compared with 18.33% for the U.S. as a whole.⁹² And the effects of the Sunbelt boom for the state's workers were mixed. From 1950 to 1976, per capita income grew by 406% in the state; the nationwide increase was 331%.⁹³ But average hourly manufacturing wages for production workers remained at the bottom of national statistics. In 1980, the state ranked last: its average of \$5.37 was 26% lower than the country's \$7.27.⁹⁴ And while the greatest employment gains were made in retail trade, that industry's weekly wages were the state's lowest.⁹⁵ Furthermore, the benefits of growth and the costs of decline were not distributed evenly across the state. After seventy-five years of top-down economic development, conditions in Sunbelt North Carolina suggested that the advantages of industrial progress had not spread as automatically as its proponents had claimed.

So by the middle of the 1970's, many of the transformations associated with the Sunbelt boom, the globalization of the economy, the civil rights movement, and the rise of Republican strength were in full swing. But as much as the state had changed in a decade and a half, the period was also marked by considerable elements of continuity. The

⁹² U.S. Department of Labor (1989).

⁹³ *Charlotte Observer* (1985d): 8A; Weinstein and Firestone (1978): 20-2.

⁹⁴ U.S. Bureau of the Census (1987): Table 649.

⁹⁵ Luebke (1990): 65.

strong, activist State extended its leadership role in industrial development activities. Labor remained a weak party in political matters, while business interests strengthened their position. The politics of business, however, did contain a new twist in the emergent split between modernizers and traditionalists. Meanwhile, modernizers continued to develop and perpetuate the North Carolina elite's long-standing ideology of progressivism. In short, industrial policy in North Carolina retained the top-down character that it had taken on early in the 1900's. Though the aggressive, institutionalized State action of the mid-seventies looked very different from the limited initiatives of Charles Aycock three-quarters of a century before, the transition from one to the other had been no clean break. Progress had been interwoven with patterns that would shape the politics of change during the turn to high-technology policies, 1977 to 1984.

Chapter Three

The turn to high technology, 1977-84

Opportunities, constraints, and policy-making in a time of economic change

The years 1977 to 1984 marked a watershed period for North Carolina's industrial policies. Governor James Hunt launched the State on an ambitious program designed to redirect the state's economy into high-technology sectors. The initiatives placed special emphasis on the microelectronics industry, but also focused energy on biotechnology, small business development, and education and training for technologically advanced production. The shift was rooted in the changing fortunes of the national economy: manufacturing industries from textiles to automobiles faced continued instability, while new sectors like electronics seemed immune to the turbulence. But these economic realities only constituted pressures for change; they did not themselves determine the response of policy-makers to these pressures. Instead, the choices made by governmental and business leaders took place in the context of political patterns with deep historical roots.

One significant factor was the strength and orientation of North Carolina's activist State. Its commitment to recruitment of outside firms alerted policy-makers to new possibilities in growth sectors of the economy, and its structures devoted to research and education provided the technical expertise necessary to move forward on high technology. Most importantly, the embeddedness of these strategies ensured their persistence through the turn to high tech. A second pattern was the growing political power of modernizers within the business and governmental elite, represented and furthered by Hunt's election as governor. As growth-oriented leaders gained positions of authority, they steered policy towards modernization and expansion of new sectors rather than the protection of

more traditional industries. Third, the exclusion of the labor movement from political power continued despite pro-labor overtures on the part of Governor Hunt. The resultant policies thus extended the involvement of the business community in the making and implementation of State initiatives. Finally, as North Carolina's image of "progressivism" came under attack in the late seventies, modernizers looked for ways to restore the state's reputation as a forward-looking place. High technology provided symbolic as well as economic dividends. Since all of these forces had deep roots in the history of North Carolina, their role in the turn to high technology stamped significant elements of continuity upon the changes of the period. Together, they undergirded the top-down approach to economic development and extended it to the initiatives of the 1980's.

This chapter will trace the impact of these four political patterns as policy-makers faced economic change in the late seventies and early eighties. The first section will address Jim Hunt's first three years in office, 1977 to early 1980, when the evolution of the four political patterns laid the groundwork for new departures in the eighties. The second section will describe the shift to high technology as a central strategy of economic development, focusing on the critical years 1980 and 1981. Political trends that had developed over time and crystallized under Hunt's first three years helped generate new directions in State policy. Finally, the third section will detail the initiatives of 1981 and beyond. The momentum of high technology carried the policies not just through the remainder of Hunt's governorship, but through the election of a Republican to succeed him.

Jim Hunt in office, 1977-80: variations on themes of the past

James Baxter Hunt, Jr. was elected governor in 1976 by a substantial margin of two-to-one. From 1977 through early 1980, he

made his mark as a leader who was active and innovative, but always within the context of the patterns of top-down development that structured North Carolina's political life. He extended the strength and activism of the State and its orientation towards recruitment and education as central strategies for economic growth. Though he had ties to organized labor, his industrial policies continued the long-standing exclusion of unions and high-level participation of the business community in political affairs. Importantly, Hunt was a modernizer, both in his ideological leanings and in the bases of his political support. His election both represented and augmented the growing power of modernizers in state politics. And as a modernizer, Hunt strived to extend North Carolina's tradition of progressivism in an era that witnessed the erosion of the state's forward-looking reputation. In all of these ways, Hunt's first three years in office were tightly linked to the past despite his innovations.

Jim Hunt's most prominent initiative from 1977 to 1980 was his extension of the strength and activism of the State on its twin foundations of industrial recruitment and education and research. Hunt staked his own political reputation on the success of the efforts, spending fully 25% of his time prospecting for new industry during his governorship. His administration organized high-profile trips abroad, assigned forty people to recruitment and spent approximately \$3 to \$4 million annually seeking out new industry, doubling the advertising budget during his first year.¹ Transferring responsibility for industry-hunting to the Department of Commerce, Hunt created a Business Assistance Division that coordinated marketing assistance, worker training, local industrial revenue bonds, and mergers and acquisitions.²

The local angle continued to be a very important part of

¹ Vass (1982): 1-4; We the People of North Carolina (November 1977): 34.

² Broughton (1978): 8; We the People of North Carolina (1977a): 31.

recruitment. In 1979, only 79 out of 179 new industrial projects in the state came through the Department of Commerce. North Carolina had 360 community-based private development groups, plus a variety of local government offices involved in the quest for new industry.³ Governor Hunt encouraged local action with his Communities of Excellence program, which rewarded localities that fulfilled several development-oriented criteria.⁴ And in 1977, Hunt held economic development conferences in all of the state's 100 counties.⁵

There were other changes in industrial policy under Hunt. One was the Balanced Growth Policy, approved by the legislature in 1979 but pursued as a general policy throughout the term.⁶ In fact, "balanced growth" had been an explicit emphasis in North Carolina's economic development since before Luther Hodges, part of the progressives' rhetorical commitment to spreading the benefits of industry widely. The idea was to encourage statewide growth, preserving natural resources and dispersing jobs so that people could "work where they lived." Governor after governor had gone on record favoring dispersed growth over the years, but Hunt attempted to institutionalize balance by pinpointing "growth centers" around the state and linking state, regional and local development agencies for more coherent planning.

Hunt also continued the long-standing focus on education and research. To symbolize his commitment to education, he volunteered one morning a week as a teacher's aide. And he promoted basic educational reforms emphasizing competence in basic skills. One unique feature of Hunt's education and research policy was his revival of the North Carolina

³ Vass (1982): 3-4.

⁴ Friedlein (1986): 48; We the People of North Carolina (1979c): 56.

⁵ Wilson (1978): 7.

⁶ For details, see N.C. State Goals and Policy Board (1978); Faircloth (1978); Stuart (1979); We the People of North Carolina (1979a).

Board of Science and Technology, initiated by Governor Terry Sanford in the early sixties but devalued by subsequent governors.⁷ Hunt brought the organization back to his immediate jurisdiction, began to chair sessions himself, and appointed a science policy advisor, Quentin Lindsey, to serve as executive director of the group. The membership was widened to include more of the state universities, private universities, local government representation, and the business community. With this enhanced prestige and the ear of the governor, the Board was able to push some innovative policies like the School of Science and Math, a secondary school in Durham for the state's gifted students. The Board also began exploring ways of linking science and economic growth, and the results of their work would become important later in Hunt's governorship.

Beyond the substance of these initiatives, Hunt also strengthened North Carolina's tradition of gubernatorial power. The sheer dynamism of his administration and its institutional reforms provided a foundation for his leadership, but he sought out increased constitutional power as well. He advocated a constitutional amendment allowing the governor to serve two consecutive terms in office, and it passed a referendum in 1977.

In addition to invigorating the activist State, Hunt extended the State's traditional relationships with the labor movement and the business community. Despite his links to unions, Hunt's industrial policies placed severe limits on his support for labor's demands. The AFL-CIO endorsed his candidacy in the 1976 election, and Hunt reciprocated by including representation from the federation on his staff, consulting with union leaders on worker issues, and recruiting higher-wage firms even if they were unionized in other facilities. But more often than not, his vigorous

⁷ This account draws primarily on interviews with Quentin Lindsey and Paul Essex. Interviewees are listed at the head of the bibliography with their positions and the dates of the interviews.

pursuit of industrial recruitment precluded active support for unions. North Carolina's low rate of unionization and low rate of "work stoppages" were indispensable elements of the State's pitch to outside industry, and any challenge to the wisdom of anti-unionism was regarded as heresy.⁸ So once in the governor's office, Hunt opposed the repeal of both the right-to-work law and the prohibition on collective bargaining by public sector employees.⁹ And when a proposed Center for Labor Education came under fire from anti-union forces, Hunt did not come to the rescue, and the State university's board voted the Center down.¹⁰ Despite enjoying more access to Hunt than to governors preceding him, unions were still largely excluded from effective participation in politics.

Still, Hunt had to act early in his term to allay business leaders' fears about some of his populist rhetoric, supporters, and policies, such as his opposition to full repeal of the inventory and intangibles taxes.¹¹ After sending out letters to 700 of them asking for advice, he declared in an interview: "No gubernatorial administration can be successful in North Carolina without the help and support of business, and I need all I can get." His pro-business industrial policies pleased the corporate community sufficiently that by 1978, the Raleigh News and Observer remarked: "much of the suspicion and distrust has evaporated, replaced by a comfortable working relationship. With few exceptions, the Hunt administration's economic policies thus far seem in basic harmony with the

⁸ The Hunt administration advertised these features of the state's political economy prominently. See We the People of North Carolina (October 1978): 8; Stuart (1979): 39. When Hunt was Lieutenant Governor in 1975, the State-commissioned "Malizia report" argued that North Carolina's low wages were due to the fact that workers received less of a share of profits than elsewhere and advocated a more open State policy towards unions. Governmental and business leaders, including Hunt, hurried to reject the report's findings. See Malizia et. al. (1975); We the People of North Carolina (1977b and 1977d).

⁹ We the People of North Carolina (1977c); see also Bernish (1976).

¹⁰ For more complete accounts of the labor center's story, see Goldman and Luebke (1985) and Adams (1979).

¹¹ See We the People of North Carolina (January 1977): 18.

corporate establishment."¹² At the end of Hunt's term, the NCCA's editorialist was able to announce: "The Governor's strong pro-business stance has won him warm appreciation from the state's business community."¹³ In addition to pursuing pro-business initiatives, Hunt also brought the business community directly into policy-making with a number of new institutions following in the footsteps of the extensive links between business and government from Hodges's time: a State Board of Economic Development to oversee the State's industrial policies; an advisory Council of Management and Development; and various ad hoc consultations, such as the Governor's Conference on Balanced Growth and Economic Development in 1978.

The most significant fact about Hunt's relationship with the business community is that it exhibited a decidedly pro-modernizer slant. His support of modernizing policies can be accounted for along three lines. First, Hunt was ideologically and politically disposed to pro-growth stances, and he used his power as governor to enhance the modernizers' position. According to Luebke, Hunt drew most of his business support from this segment of the business community, in terms of both campaign finance and personal assistance.¹⁴ Modernizers took leading roles on the boards he set up in State government. The State Board of Economic Development was headed by a Wachovia bank executive. The Council of Management and Development was chaired by the president of R.J. Reynolds and vice-chaired by a top executive from Akzona, a western North Carolina high-technology company. Wachovia chief John Medlin led Hunt's State Conference on Economic Development and Balanced Growth. And in interviews, Hunt's advisors list people like Carolina

¹² News and Observer (22 January 1978).

¹³ We the People of North Carolina (1981): 12 and (March 1982): 44.

¹⁴ Luebke (1985): 320-5; (1990): 73-5.

Power and Light's Sherwood Smith, Wachovia's Medlin, and NCNB bank's Hugh McColl as Hunt's key sounding boards in the business community.¹⁵ Modernizer leadership in the state was thus grounded in a variety of institutional and personal ties and enhanced by Hunt's governorship.

Second, modernizers were gaining influence in state politics independent of Hunt's actions. As much as Hunt boosted the position of the modernizers, his policies were also a response to their growing power. In the economy, they represented the faster-growing segments, the chief beneficiaries of the Sunbelt boom. Traditionalists, on the other hand, were attached to the part of the economy most hurt by the turbulence of the seventies, where the share of the state's total employment was dropping. The geographical focus of modernizer strength, the metropolitan Piedmont, was also electorally ascendant on the heels of urbanization, general population growth, and redistricting. Furthermore, modernizers' power had a long series of historical precedents. Ideologically, North Carolina's brand of "progressivism" dated back to Charles Aycock's educational initiatives at the turn of the century, becoming more institutionalized under Luther Hodges in developments like the Research Triangle Park. Importantly, the North Carolina Citizens Association was not the basis for the growth-oriented faction. The organization sought to straddle the fence, editorially supporting both modernizing and traditionalist positions.¹⁶

The third basis of Hunt's pro-modernizer slant was the fact that traditionalists focused less of their political energy on State-level policies in the 1970's. Traditionalists supported low taxes and loose regulations,

¹⁵ Interview with Paul Essex.

¹⁶ See We the People of North Carolina (May 1977): 16; (July 1977): 24; (1977b); (1977d); (1979c); (December 1977): 40-1, 51-2; (March 1978): 41; (September 1978): 10; for a sampling of these mixed perspectives.

but they had no concrete program for direct State assistance. Since their primary concern was national trade policy, their chief demand on the governor was to take symbolic stands on behalf of traditional industries. For example, in 1978 Hunt sponsored a resolution at the Southern Governors Conference calling for federal action against textile imports.¹⁷

At the local level, however, traditionalists continued to wield extensive power despite the ascendancy of modernizers in statewide politics. The central issue was the "stability" of local labor markets: traditionalists insisted upon keeping wages down to maintain slim profit margins and continue their massive retooling. In many cases local elites feared that a potential high-wage recruit would disrupt a community's labor market by importing high-wage jobs or, worse, toleration of unions. And since North Carolina's industry-hunting programs had always had a strong local component, one which Hunt strengthened during his first term, local elites could often mobilize to have dangerous prospects "disinvited."¹⁸

In the seventies, numerous conflicts erupted along these lines. Raleigh's Chamber of Commerce turned down two potential recruits, a Miller Brewery and a Xerox facility, because they refused to agree to bar unions. The Roxboro Chamber similarly disinvited Brockway Glass Company in 1977. The most dramatic confrontation was in Cabarrus County, where Cannon Mills's executives opposed the location of a high-wage Philip Morris cigarette-manufacturing plant in the area, while local officials, the general public and Governor Hunt supported the idea. Hunt declared: "We want good jobs with good pay, and we're having to fight industrialists who don't want it."¹⁹

¹⁷ We the People of North Carolina (October 1978): 9.

¹⁸ Raleigh News and Observer (1978b): 25.

¹⁹ See Luebke, McMahon and Risberg (1979); Luebke (1990): 75-7, 93-4; Cobb (1982): 255; Wood (1986): 164-8; Raleigh News and Observer (1978b): 25.

Cannon Mills eventually backed down in Cabarrus County, indicating that resistance by local elites was by no means an absolute barrier to Hunt's recruitment strategy. But counter-examples like those from Roxboro and Raleigh suggested limits to the modernizers' power. And most of the time, the conflict never reached as open a stage as it did in Cabarrus County. Instead, Hunt's administration generally made an attempt to "match" industrial prospects with localities that were likely to welcome the new industry.²⁰ So the local power of traditionalists was exercised preemptively, before outside industry even began discussing sites.

As a result of these diverse factors, modernizers held sway in state politics as the eighties began. They had the support of the governor, were generally more powerful than the traditionalists and had more interest in spurring direct State action for economic development. Their power was by no means absolute, however, as the evidence about local conflict indicates. Modernizers had to find ways to promote their objectives without tangling with local elites.

In addition to enhancing the State's activist role, extending traditional governmental relations with labor and business, and promoting the aims of modernizers, Hunt used his first years in office to defend North Carolina's "progressive" heritage. His coalition included blacks, organized labor, and liberal whites, and once in office, he pursued programs favored by these constituencies: increased funding for education, legislation strengthening the state's utilities watchdog, aid to the elderly, health and nutrition programs for pregnant women, State support of day care, the Equal Rights Amendment for women and the appointment of blacks and women to government posts.

²⁰ Faircloth (1978): 48.

In the late seventies, however, the state's forward-looking image was under attack from a number of quarters. Academic studies, journalistic reports, and surveys by citizen groups cast doubt on how progressive North Carolina really was, challenging the state's record on political accountability, legal fairness, and a host of social indicators.²¹ The Citizens' Conference on State Legislatures ranked the General Assembly 47th among states on a scale of accountability, openness, independence, representativeness, and professionalism.²² The Midwest Research Institute placed the state 46th on a scale of such indicators as infant mortality, level of education, voter registration, and wages.²³ In legal matters, critics pointed out that the state had the highest number of criminals on death row, two-thirds of whom were black or native American. In the late seventies, eleven of the eighteen Americans that Amnesty International designated "prisoners of conscience" were in North Carolina jails. And in 1970, North Carolina ranked last among southern states in number of eligible blacks registered, and the Ku Klux Klan maintained a strong presence. Add to these facts the state's low wages, low rates of unionization, and a variety of other low social statistics, and North Carolina's image was in danger.²⁴ As one commentator concluded: "This is a state of paradoxes: behind every fact that can be cited as proof of its progressivism lurks another which suggests just the opposite."²⁵

This deterioration of the progressive image was of great concern to the state's modernizers. Governor Hunt told the press: "Whatever happens to me, I'm concerned about North Carolina, our image, our good

²¹ See Bass and DeVries (1976); Peirce (1975); Beyle and Black (1975); King (1978a); Myerson (1978); Koeppel (1976).

²² Peirce (1975): 144.

²³ Bass and DeVries (1976): 223.

²⁴ Beyle (1975); Myerson (1978); King (1978 and 1978b); Peirce (1975); Bass and DeVries (1976).

²⁵ Peirce (1975): 117

name."²⁶ Consequently, as modernizers crafted policies, one of their concerns was to restore the image of progressivism that North Carolina had gained over the years. But from V.O. Key's 1949 study to the above-cited critics in the seventies to Luebke's recent analysis, observers have pointed out the conservative tendencies embedded in the perspective of the state's forward-looking leadership.²⁷ Modernization meant civic action by business leaders, an activist state, an interest in raising per capita income, education, and "balanced growth." But it was always a top-down modernization: led by the elite, based on heavy business involvement in policy-making, the exclusion of unions, and a hostility to economic policies that were redistributive in nature. So if the threat to the state's progressive image was going to spur reform, it was likely to be a certain kind of change, in the mold of previous modernizations I have charted in this essay.

Hunt's first three years in office thus represented a time of solidifying and advancing many of the patterns of top-down industrial policy that had marked North Carolina's history. Hunt initiated new programs, but within the framework of an active, recruitment- and education-oriented State.²⁸ He was identified more closely with labor than past governors, but the content and process of his policy-making remained firmly linked to business interests and participants. Within the business community, Hunt aligned himself with modernizers. And together, Hunt and other modernizers looked for ways to defend North Carolina's progressive reputation. When Hunt led the state in new directions in the early 1980's, he did so within the framework established by these patterns.

²⁶ King (1978a).

²⁷ See also Chafe (1980) for an excellent study of progressivism in North Carolina.

²⁸ Into 1980 high technology did not play any notable role in the governor's rhetoric or actions. See Hunt (1982): 259, 469; We the People of North Carolina (1980d); We the People of North Carolina (April 1980): 34.

The genesis of "Silicon Valley East," 1980-1981

As his third year as governor drew to a close, Jim Hunt was able to claim a number of successes in attracting factories to North Carolina. Between January 1977 and January 1980 companies announced \$5.9 billion in new investment and 90,000 new jobs, many outside the state's traditional industries.²⁹ But beneath these positive figures lurked a changing reality. Manufacturing industries that had been the targets of recruitment for so long would be much more difficult to recruit, and new sectors held promise for the future, particularly in areas of high technology. Jim Hunt's administration responded with a massive State investment in high-technology development in North Carolina. In 1981, he presented a package to the General Assembly recommending a \$24 million dollar expenditure over two years to launch a center for microelectronics research and development as well as a smaller amount for a Biotechnology Center. Winning legislative approval, Hunt went on in future years to secure funding for more high-technology worker training, beefed-up university programs, and the development of innovative small businesses. By the time he left office in 1985, North Carolina had embarked on a new course in industrial policy.

But this dramatic change did not occur in a vacuum. Hunt's response to a changing economic environment took place within the context of a particular set of political patterns linked to top-down mechanisms of development. Without these structures, the governor's response to the same economic facts would have been different. First, the State's commitment to aggressive action based on recruitment, education and research made policy-makers aware of the possibilities of high tech,

²⁹ Vass (1982): 5; Hunt (1982): 10 January 1980.

provided the technical expertise necessary, and steered the resultant policies towards recruitment and research. Second, modernizers' increasing power in state politics vis-à-vis traditionalists tilted policy towards emerging growth sectors of the economy. Third, policy-making followed the long-standing traditions of involving business leaders and excluding labor, focusing the ensuing policies on industry's concerns. And fourth, the turn to high technology was part of an attempt to revive North Carolina's progressive image, so the policy was designed to reap symbolic as well as economic rewards. As much as the high-technology initiatives represented a new departure for State policy, then, the programs bore the unmistakable stamp of these historical patterns.³⁰

Economic changes set the stage for the initiatives of 1980 and 1981. The problems associated with globalization, which had shaken the state's traditional industries in the seventies, appeared likely to cause increasing dislocation in the eighties. And the specter of general manufacturing decline in America suggested that it was not just textiles that would be affected. The same corporate rationale that could bring branch plants to North Carolina could also whisk them away to the developing world, which offered even lower production costs than the South.³¹ Top advisors to Hunt sensed the need for a change of strategy.³² In addition, North Carolina faced fiercer competition from other states for the industrial prospects that remained, as Frostbelt decline led policy-makers in the North to engage in recruitment. In the mid-seventies, articles in the National Journal and Business Week pointed to a "second

³⁰ For narrative accounts of the emergence of high technology as a focus of State policy, see Kelly (1981) and Whittington (1985). My account also relies upon interviews with Jim Hunt, Paul Essex, Quentin Lindsey, Gary Pearce and William Friday.

³¹ MDC (1986).

³² Interviews with Quentin Lindsey and Paul Essex. Extra-governmental reports also challenged the prevailing approach. See Stuart (1979); Mahaffey and Doty (1979).

war between the states" over industrial development.³³ With competition from the developing world added in, the quest for branch plants was becoming more difficult.

At the same time, economic forecasters pinpointed the microelectronics industry as a major force in the future of economic growth.³⁴ The industry built "integrated circuits," networks of transistors etched onto silicon chips. These semiconductors would be the building blocks of modern electronics, touching all parts of life from the most sophisticated equipment to the most common consumer goods. Rapid innovation in the design of chips and booming areas like Silicon Valley in California and Route 128 around Boston led analysts to conclude that the future growth of the industry would be breathtaking.³⁵

While these economic facts provided the impetus for change, new directions in State policy derived from political patterns. First, the State itself provided the foundational leadership for a response, mobilizing other groups in society but paving the way on its own terms. Despite the above-mentioned doubts about its future, the policy of recruitment was deeply embedded in North Carolina's political life. Hunt had staked his political success on continuing to recruit plants to North Carolina. Recruiting was also an intricately institutionalized function of the State, attached to a complex network of organizations and officials committed to the practice. A whole generation of bureaucrats had entered a system in which economic development and industrial recruiting were synonymous. The apparatus had endured through the era of Sunbelt growth, the rise of

³³ For a summary of inter-state competition, see Cobb (1982): 193-208; the articles referred to are *Business Week* (1976) and Haveman et. al. (1976).

³⁴ I will refer to the industry (Standard Industry Code 3674) as the "microelectronics," "semiconductor" and "integrated circuit" industry interchangeably.

³⁵ See Sampson et. al. (1985): 37; Rothenberg (Chapter 7); Barron (1980) for a sense of the enthusiasm surrounding chip technology. For statistics on high tech growth, see Sampson (1985): 263 and U.S. Office of Technology Assessment (1984): 141.

the Republican Party, and the convulsions of the seventies. Not surprisingly, the first murmurs of a high-technology initiative resulted from a recruitment prospect. In early in 1980, General Electric Company informed industrial development officials that the Research Triangle Park was on its short-list for a \$100 million research and testing center for microelectronics technology. The possibility set the State's wheels in motion.

The other pillar of State industrial policy -- education and research -- also helped spur the governor to action on high technology. In 1977, the Board of Science and Technology's predecessor opened a dialogue with university researchers about semiconductor technology and briefed Hunt on the industry. The Research Triangle Foundation had also begun to look into promoting the Park as more of a center for the electronics industry.³⁶ Though these early explorations generated no concrete actions, the Board of Science and Technology and the other institutions of government-university cooperation were prepared to take up the challenge when new possibilities arose in 1980.³⁷

Hunt's first actions in response to GE's interest followed in the footsteps of previous State-led initiatives like the Research Triangle Park. He called together a pair of committees. One, led by the presidents of the University of North Carolina system, Duke University, and the community college system, was to explore the state's potential for joining the chase for high-technology development. The other, headed by science advisor Quentin Lindsey, was charged with exploring the technical details of such development. In June 1980, the committees reported back affirmatively, arguing that it was "almost too late to enter the microelectronics race: next

³⁶ Interview with Sherwood Smith.

³⁷ Kelly (1981): 19; interviews with Quentin Lindsey and Paul Essex. On the importance of the Board in the development of the policy, see Howard and Kragie (1987): 176-90.

year will be too late."³⁸ Their recommendation was for the State to set up an educational and research center for microelectronics technology, run by a non-profit corporation and linking the research universities and the Park-based Research Triangle Institute. Such a center would attract high-technology firms from outside the state, spawn indigenous high-tech growth, and prepare the state's universities and work force for the microelectronics-based future.

The leadership of the State and the governor continued as the project evolved. Late in June, after the legislature had adjourned, Hunt secured \$972,360 from the State's Contingency and Emergency Fund to launch the program.³⁹ On July 16, he incorporated the Microelectronics Center of North Carolina (MCNC) and held its first board meeting. General Electric announced in August that it had in fact chosen the Park as the home for its center and cited the new MCNC as a crucial factor in its decision. Hunt, in the meantime, was campaigning for election to a second term as governor, though his victory was considered almost a sure bet. Incorporating the MCNC into his basic stump speech, he appeared on television displaying a silicon chip and promising to lead North Carolina into a high-technology future.⁴⁰ Shortly afterward winning a landslide victory, Hunt led a highly publicized trip to California to promote North Carolina as an attractive place for Silicon Valley firms to relocate or expand. The MCNC was, of course, a central focus of his sales pitch.⁴¹

The leading role of Hunt and other State officials was evident in the campaign to sell the project to the legislature. The MCNC, the Biotechnology Center, and related initiatives would require millions of

³⁸ Kelly (1981): 20.

³⁹ Kelly (1981): 20.

⁴⁰ Interview with Gary Pearce.

⁴¹ Raleigh News and Observer (21 November 1980 and 28 December 1980); Hunt (1982): 791-6.

dollars of State investment in a time of economic uncertainty and impending federal cutbacks under Reagan. But Hunt made the Center his top legislative priority, reiterating its importance in his inaugural and state-of-the-state addresses in early 1981. He and science advisor Lindsey convinced the Advisory Budget Commission (ABC) that the proposal was essential for the state, and many of the key legislative leaders sat on that body.⁴² Some legislators wanted the proposal cut because it was, in the words of Howard Coble of Greensboro, "a slap in the face of the proven corporate citizens" like textiles, furniture, and tobacco. But overall, there was very little opposition raised by members of the Assembly.

The Hunt administration had also skillfully institutionalized the program so that by the time the legislature considered the measure, it was almost a fait accompli. One million dollars had already been invested; a board was in operation; General Electric was about to build a \$100 million plant with the expectation that the MCNC would be in existence; and Hunt had promoted the Center in his California tour.⁴³ Furthermore, the proposal did not receive a great deal of public scrutiny. Committees that reviewed the measure heard mostly the Center's praises, with only one presentation from a legislative staffer suggesting anything negative about the program. One environmental and worker-safety organization, unable to secure time in an official hearing, held their own forum to air concerns about the integrated circuits industry. Senator Marshall Rauch, who sat on the Advisory Budget Committee, remarked after the measure passed: "Who the hell knows anything about microelectronics? In my opinion, the legislators just accepted what they considered fact from the Governor."⁴⁴ Governor Hunt's leadership marked the initiative with the stamp of

⁴² We the People of North Carolina (January 1981): 20; Kelly (1981): 21; interviews with Jim Hunt, Quentin Lindsey and Fred Aikens; Hunt (1987): 6.

⁴³ Whittington (1985): 14-5; Kelly (21-2); interview with Jim Newlin.

⁴⁴ Kelly (1981): 18-9.

aggressive State action that had characterized so much of industrial policy in North Carolina's history.

Two other political patterns -- the involvement of business and not labor and the growing power of modernizers -- also played fundamental roles in the genesis of the high-technology strategy. When Hunt organized the first board for the Microelectronics Center, he invited a number of business leaders from his familiar list: Sherwood Smith of Carolina Power and Light, Hugh McColl of NCBN bank, and Thomas Troup of Akzona Inc., the Asheville-based multinational high-technology firm. These individuals were tied to other modernizing institutions, such as Hunt's other business boards, the Research Triangle, and the Business Foundation of North Carolina (which linked the business community with U.N.C.'s business school). The other key constituency invited was the academic community.⁴⁵ As the policy took shape it was modernizers, and not traditionalists or labor, that played a guiding role.

Modernizer support was the critical factor, given the balance of power in the state that I described above. And the initiative gained the backing of the broader business community, indicated by the NCCA's editorial endorsement of the MCNC and its devotion of an enthusiastic special issue of We the People of North Carolina to the Research Triangle Park in June 1981.⁴⁶ But a concerted campaign by traditional industrialists to redirect the funds elsewhere might have weakened Hunt's persuasiveness with the legislature. Their response was thus of great importance despite the power of modernizers in Hunt's administration. Traditionalists had two main concerns. First, the high cost of the project ran against traditionalists' insistence on low government spending to maintain low taxes. Second, some traditionalists viewed the MCNC as a

⁴⁵ Knox (1980).

⁴⁶ We the People of North Carolina (1980c and June 1981).

symbol that the State was "writing off" the long-standing bulwark of its economy.⁴⁷

Hunt officials spent time with traditionalist leaders in a "rear-guard action" designed to secure their support.⁴⁸ One factor in Hunt's favor was that the technical arguments in favor of high technology were difficult to counter at this time: the growth of the microelectronics industry seemed a sure bet. And it is important to recall that by the time the MCNC was on the drawing board, the textile industry had already launched a massive program of technological investment on its own. Charles Dunn, leader of the Textile Manufacturers Association at the time, says that the textile industry was "not unsupportive of these efforts." Hunt had proven himself a pro-business governor on the main issues facing the industry and had gone to bat for textiles on national trade policy.⁴⁹ In addition, the high-tech initiatives had the distinct advantage of side-stepping conflicts with local elites that Hunt had faced in the seventies with other high-wage recruitment. Most of the highest wages would be paid to scientists and technicians who would work in the Research Triangle area, and who would not bid up the wages of production workers in any case. So on the national and local levels, and on general business issues at the state level, the position of the traditional industries remained secure. And this was where they focused most of their political energy. While the MCNC was not something traditionalists themselves would have put forward, they did not fight it.

The final political pattern that played a part in the turn to high technology was the commitment of modernizers to making North Carolina

⁴⁷ Interview with Charles Dunn.

⁴⁸ Interview with Gary Pearce.

⁴⁹ Interview with Charles Dunn. Dunn wrote an article (1981) outlining possible State support for the textile industry, but it hinted no opposition to high tech plans. The next year, he proposed a State textile research center to match the MCNC. (Business North Carolina [1982]) But the priorities were low taxes, national policies, and local labor markets.

a "progressive" state and to revive its flagging national reputation as forward-looking.⁵⁰ Hunt called the MCNC "the biggest step any state in the nation has ever made" and "the chance of a lifetime," capable of placing North Carolina on "the leading edge of what can be a Second Industrial Revolution."⁵¹ The project's proponents also deployed the familiar rhetoric of top-down development, insisting that the program of aid to industry would benefit all citizens. At one point Hunt asserted that hundreds of thousands would one day be employed by the industry, at higher wages than North Carolina's average. Importantly, Hunt argued that the high-tech push would benefit the entire state, thus serving as an extension of his balanced growth policy. "If there has ever been an industry that lends itself to balanced growth," he said, "this is that industry."⁵² "We can't overestimate what it can mean for North Carolina. The Microelectronics Center of North Carolina will be a magnet for research and development companies. Companies that use the chips will be attracted to all parts of the state."⁵³ The prosperity of microelectronics would spread through a number of mechanisms: by attracting production facilities of firms with R&D offices in the Park, by spawning new start-ups as "spin-offs" of Park-based companies, by bringing in manufacturers of goods that use chips, and by generating technology to help existing industries modernize. A state-of-the-art telecommunications system would also link all parts of the state to the resources available in the Center's headquarters.

The state would provide a home for "Silicon Valley East," a nucleus for research that rivaled high-tech complexes in California and

⁵⁰ This information is drawn from interviews with Jim Hunt and Quentin Lindsey as well as Herbert (1981) and Hunt (1981b).

⁵¹ Kelly (1981): 19; Luger (1981): 27; Hunt (1982): 805.

⁵² Durham Sun (24 June 1982): C10; see also The Leader (23 July 1981 [in North Carolina Collection Clipping File, "Microelectronics Industry"]) and Hunt (1987): 7.

⁵³ Hunt (1982): 806.

Massachusetts. Hunt declared: "We will lead the South in the struggle to open the doors of progress and opportunity to all our people."⁵⁴ This rhetoric echoed that of the founding of the Research Triangle Park, and indeed of a long tradition of political discourse in the state. A signal was to go out from the Center: North Carolina was still a state committed to progress, forward-looking and bold. The policy of moving North Carolina into the 21st century on a wave of technological progress thus held major symbolic and rhetorical power for modernizers, boosting the proposal in the eyes of the general public. But the benefits would spread to the state's population through the familiar promise of filtering down. Industry would come to the state, and all the advantages of high technology would follow in its wake. So through an era of economic change, the top-down approach to economic development remained constant.

High-tech policy in North Carolina

In May of 1982, the State broke ground in the Research Triangle Park for the Microelectronics Center of North Carolina. The state-of-the-art facility contains the whole range of equipment necessary for cutting-edge research and education in the design and production of silicon chips, including a "clean room" for the fabrication of silicon wafers and a telecommunications and data transmission network linking many parts of the state. In 1988, the MCNC also took responsibility for the State's new Supercomputing Center, a multi-million dollar program. The Center is linked closely to universities' programs in semiconductor technology, providing various kinds of financial and technical support. One of the MCNC's major functions is to attract microelectronics firms to the area, and industry may take advantage of the MCNC's activities in a variety of

⁵⁴ North Carolina Clipping File, "Microelectronics Industry." From Hunt's Inaugural Address, January 1981.

capacities. "Industrial affiliates" who contribute \$750,000 gain access to the Center's intellectual property, and smaller contributors can obtain other services. Business people also sit on various boards and committees, advising the Center's administrators on industry's needs. Through fiscal year 1989, State expenditures on the MCNC amounted to \$180 million, 78% of the Center's total funding.⁵⁵

In addition to the founding of the Microelectronics Center, North Carolina has embarked upon a number of other high-tech initiatives in the eighties.⁵⁶ One key area of focus is training. The State has bolstered programs in community colleges, especially in targeted areas like microelectronics, and increased funding for university-level research and teaching in high-technology fields. This educational emphasis has extended to younger students as well, through programs to improve math and science instruction and an initiative aimed at "Education for Economic Growth."⁵⁷ The most high-profile project is the North Carolina School of Science and Math, but the State has also created programs to enhance teaching and scientific equipment at schools across the state.

In the 1981 budget the General Assembly also funded the North Carolina Biotechnology Center, a Park-based effort to support university programs, assist business development, and boost the state's reputation as a center for technological innovation. In 1983, the New Technology Jobs Bill created the Technological Development Authority (TDA) and enacted two new programs aimed at fostering small businesses: the North Carolina Innovation Research Fund to provide equity financing for new and existing small businesses; and the Incubator Facility Program to fund

⁵⁵ Microelectronics Center of North Carolina (1989); N.C. Office of the State Auditor (1988); Little (1989): 8.

⁵⁶ For comprehensive, though now dated, summaries of many of the State's programs see Luger (1985): 196-201; Luger (1984).

⁵⁷ N.C. Commission on Education for Economic Growth (1984).

"incubators," where budding businesses can share space and staff and receive some technical assistance. Together, the two funds received \$875,000 in their first budget (1983-85). The community college system also runs Small Business Centers around the state, and the university system houses a Small Business and Technological Development Center (SBTDC).⁵⁸ And the Board of Science and Technology continued to give Small Research Grant Awards for various projects, a program that predated the initiatives of the eighties.⁵⁹

The period 1980 to 1984 witnessed the turn to high technology as the State's central economic development strategy. But the programs have persisted beyond these initial years and beyond Hunt's governorship. In 1984, North Carolinians elected their second Republican governor in the century, Jim Martin, and they reelected him in 1988. In his 1984 campaign, Martin argued that the State needed to pay more attention to North Carolina's traditional industries. And once elected, he appointed an Assistant Secretary of Commerce for Traditional Industries, proposed cutbacks for some the high-technology programs like the Biotechnology Center, and argued for less overall State involvement in economic development.⁶⁰ But in general, he has supported the continuation of programs like the MCNC, given strong endorsement in his official statement of policy. He has also promoted North Carolina's expensive (but unsuccessful) bids for major national research centers such as American semiconductor manufacturers' Sematech and the U.S. Government's superconductor supercollider project.⁶¹ And he backed the State's multimillion dollar supercomputing center. The change in the

⁵⁸ Luger (1985): 199; Nyrop (1984): 16.

⁵⁹ Howard and Kragie (1987): 177.

⁶⁰ Luebke (1990): 31-5; Finger (1987); Durham Morning Herald (30 May 1987); N.C. Department of Commerce (1986).

⁶¹ Durham Morning Herald (17 June 1987): A1; Durham Sun (3 September 1987): 9C.

governor's office from Democrat to Republican did not significantly alter the State's commitment to technology-based growth.

The staying power of the policies can be accounted for in a number of ways. On an economic level, the technical arguments for the turn to high technology did not change. Despite the ups and downs of industries like microelectronics, the outlook for high-tech growth continued to look bright. Institutional factors also played a role. Once set up, the high-technology programs themselves became institutions with constituencies in the business community, the political world, and the State committed to their success. So just as pre-existing institutional commitments helped produce the policies in the first place, the new organizations the strategies spawned endowed them with continuity on their own terms. Finally, the change to a Republican governor in 1984 should not be regarded as a radical ideological swing. If Luebke is right that the principal cleavage in the North Carolina elite is between traditionalists and modernizers, then Martin represents a blend between the two, both in his ideology and in the sources of his political backing. While addressing some attention to the state's traditional industries, he retains Hunt's commitment to progress through State- and business-led modernization.

The endurance of high technology as a strategy is best understood, however, in the context of the historical patterns I have described in this essay. If the policies had sprung up under Governor Hunt with no roots in the long-term development of the state's economy, politics, and institutions, then one might have expected them to wilt once Hunt had left office. But if, as I am contending, the programs of the eighties grew out of the patterns of the past, then their staying power is explained by their continuity with the state's historical development. The policies were generated within a long-standing tradition of State activism, oriented towards recruitment of outside industry and developing the state's

educational and research capabilities. They gained strength from the growing power of modernizers in state politics, and particularly in Hunt's administration. Other groups with interests in State policy -- traditionalist business leaders and the labor movement -- did not play a significant role in the genesis or shaping of the policies. Finally, the initiatives flowed from the state's unique ideology of progressivism, under attack in the late seventies. All of these patterns made their mark on the programs that emerged, endowing them with the familiar characteristics of top-down industrial policy.

Chapter Four

Conclusion

North Carolina's high-technology policies in past, present , and future

As new as North Carolina's turn to high technology appeared in the early eighties, it emerged from a long series of historical developments shaping the State's industrial policies. Understanding the rootedness of the current programs in the past is important for three reasons. First, historical patterns help explain why the State's high-tech initiatives turned out the way they did, why policy-makers chose not just any program of high-technology development, but a particular one. Second, identifying the roots of current policies makes possible an assessment of their effectiveness. Developmental patterns are not merely of historical interest; they also form the foundations upon which the policies succeed or fail. Third, high technology's past also holds clues to its future. The patterns out of which the current policies arose will continue to shape the state's politics, and new patterns related to high-tech policy will add new features to the context of policy-making. This final chapter, then, will review the explanatory, evaluative, and predictive implications of the foregoing discussion.

Characters and context: explaining North Carolina's policies

I argued in the first chapter that adequate stories about economic policy-making must include two kinds of accounts. First, they must pinpoint the major characters of the tale, the economic interest groups and State bodies whose actions pushed policies in various directions. Second, they must reveal the historically rooted economic and political context within which these characters acted. This section will review the role of characters and context in North Carolina's turn to high technology.

In several respects, characters in the story of North Carolina's high-technology policies exercised vital influences:

- **Societal characters.** As society-based theories would predict, the balance of power between economic interest groups set critical parameters for North Carolina's high-technology programs. One significant factor was the weakness of the labor movement.¹ Its consequent exclusion from effective political participation generated a pro-business slant to policy-making that was evident in the turn to high technology. Another dimension of societal power was the ascendancy of "modernizers" over "traditionalists" within the business community during Governor Jim Hunt's administration. The influence of pro-growth modernizers helped direct policies toward bold, forward-looking policies aimed at technological advance.

- **The State.** An account of characters in North Carolina cannot neglect the independent role of the State. From its roots in the turn-of-the-century triumph of the Democrats through the rationalizations of governors in the twenties and thirties and the enhancements of Governors Hodges and Hunts, the State developed the capacity to lead North Carolina's industrial promotion efforts. Though the business community certainly participated in policy-making, more often than not it was State officials that served as the initiators and organizers of the principal projects. Over the years, bureaucratic and political actors developed a strong interest of their own in the top-down strategies they pursued. And the turn to high technology was no exception: State action brought high tech to the fore and led the other relevant actors to make the initiative a reality.

But even a full account of characters that includes State officials

¹ In 1986, the unionization rate was 5%. (Kinney [1986]: 18)

falls short without a description of the context in which policies were made. First, the economy itself provided a critical element of this context:

- **Industrial structure.** The state's early reliance on labor-intensive industries shaped the political terrain in subsequent years. Labor's weakness sprung to a large degree from the fact that labor comprised such a high percentage of costs in industries like textiles; employers thus faced especially powerful incentives to block organizing efforts. The emphasis on the traditional labor-intensive base also eventually fostered the cornerstone of the State's industrial development strategy: a series of policies aimed at diversifying the economy through recruitment. Subsequently, the changing industrial mix associated with diversification led to the emergence of a "two-track" economy that in turn engendered the split between "modernizers" and "traditionalists." The growth of new industries undergirded the ascendancy in state politics of the modernizers, who were instrumental in leading North Carolina down the road to high-technology development.

- **Industrial geography.** North Carolina's industrial development was marked by dispersion rather than intensive urban agglomeration. The scattering of industry further weakened labor's chances of effective organizing. And it established power-bases for local elites in traditional industries, making centralized programs in the Research Triangle that did not challenge local social relations attractive to modernizers. But dispersal was always limited, reserving the most intensive growth for Piedmont areas and thus undergirding the rise of the modernizers and the high-tech initiatives they favored.

- **Relationship to the national economy.** Industrializing later than the rest of the country, the state turned early to outside capital. The resultant dependence on the relocation of branch plants helped embed the orientation of industrial policy toward recruitment, a feature that endured

into the era of high technology. The imperatives of recruitment further eroded the ability of labor to organize, since the state's anti-union climate was a critical selling point to industrial prospects.

So many of the historical patterns traced in this essay -- the policy of recruitment, the weakness of the labor movement, and the strength of modernizers -- had their roots in the economic development of the state. But these economic factors still left room for actors' choices, which themselves took place in a complex political context in which both institutions and ideas exerted independent influences:

- **The institutional embeddedness of recruitment.** Born out of North Carolina's relatively late industrialization, institutionalized under Luther Hodges, cemented as the State's fundamental strategy through governor after governor, and given additional impetus in Hunt's first term, recruiting branch plants was deeply ingrained in the state's political institutions and culture. While its prominence grew out of the economic context, recruitment quickly took on a life of its own. A complex web of powerful institutions came into being to support industry-hunting. And political leaders and bureaucrats at all levels of government developed a stake in its continued success, as did "modernizers" in the business community that stood to gain from growth-oriented State policies. So when the time came to design a strategy to spawn high-technology development in North Carolina, policy-makers turned first to recruitment. Almost every initiative, from the Microelectronics Center to the Biotechnology Center to customized training for incoming businesses to the Research Triangle Park itself, had as one of its central aims the attraction of outside firms.² And these recruitment-oriented programs dwarfed those aimed at the development of indigenous industry. In the

² Luger (1984): 281; Whittington (1986): 14, 16; Southern Technology Council (1989): 11.

1983-85 budget, for example, the State spent twenty times as much on the Microelectronics Center alone as it did on the two small business assistance programs under the TDA.³

- **The institutionalization of science policy.** The existence and strength of institutions geared towards research and science policy also helped shape the outcome of the turn to high technology. The Research Triangle Park served both as a model and as a site for the new high-tech activity. The initiatives of the eighties were echoes of the RTP in their genesis (high-level discussions between State, university, and business leaders), in their form (non-profit corporations linking those same actors in joint enterprises), and in their focus on attracting large national firms engaging in state-of-the-art pursuits. And the Park provided an already established location for the kind of activities policy-makers wanted to promote. In addition, the revived Board of Science and Technology lay the conceptual and institutional groundwork for the turn to high technology through its early explorations of the microelectronics industry and its ascendancy within the Hunt administration. Without these legacies, North Carolina would not have taken as bold a step, despite the compelling economic arguments for the turn to technology. Policy-makers might have sought other ways to capture the advantages of technological innovation, but the focus on original research was an outgrowth of the state's own history.⁴

- **The institutional basis of modernizers' power.** As I noted above, the power of the business community (and of modernizers within it) were decisive factors in the development of high-tech policy.

³ Nyrop (1984): 16.

⁴ The prominence of research has taken on institutional form: the chancellors (top officials) of five universities sit on the MCNC's Board of Directors, and one serves as Chair; the President of the Research Triangle Institute (RTI) is also a member; the Deans Advisory Council and the Chairmen Technical Council are made up entirely of university and RTI officials.

But the specific institutional basis of that power is important to specify. While the "peak" North Carolina Citizen's Association gained strength through the seventies, business exerted power primarily through direct, high-level involvement in State policy-making. And modernizers in particular gained access to the reins of governmental power. Labor and traditionalists had no similar institutional bases.

As a result North Carolina's high technology policies exhibit a strong orientation toward modernizer businesses, embodied in a continuation of the pattern of their direct involvement in policy-making. At the MCNC, for example, six company representatives drawn entirely from growth-oriented firms sit on the Center's board.⁵ There is also an Industry Executive Council (IEC) which exists to ensure that the Center's programs are "industry relevant." And the high-tech firms represented on the IEC participate more directly by supporting the MCNC's work financially and by sending employees to work at the Center as "Resident Professionals." Top contributors, called "Industrial Affiliates," can pay MCNC a fee to gain access to any intellectual property produced by the Center. So both in its mission and in its governance, the MCNC is a modernizer institution, its programs geared toward goals set by large, growth-oriented corporations in cooperation with scientists and university officials. The flip-side of modernizer involvement is that labor and traditionalists are on the outside of high-tech policy-making. High-technology policies have included a major focus on worker training, but the control of the content is often left to industry, which monitors programs for relevance. Similarly, leaders of traditional sectors have played little role in steering the course of high-technology strategies.

⁵ The 1989 Board included representatives of four national technology firms (IBM, Digital Equipment, DuPont, and Northern Telecom) and two executives from North Carolina-based pro-growth companies (NCNB bank and Carolina Power and Light.)

Governor Martin's insistence that traditional industries be given more of a priority by the State has not generated any reorientation of organizations like the MCNC toward the transfer and diffusion of technology to existing businesses.

- **The political ideology of progress.** From the beginning of the century, many members of North Carolina's political and economic elite have espoused a particular brand of progressivism, committed "top-down" approaches to modernizing the state's economy. No doubt these ideas about progress grew out of the economic and institutional context I have described. But the ideology of progressivism also exerted several independent influences. It shaped the way modernizers defined their interests, committing them to public projects in the top-down mold. It provided them with a language of state pride through which they could gain legislative and public acceptance of such a large commitment to high technology. And it steered policies toward high-profile projects that promised to reinforce the state's progressive image, especially when that reputation was under attack in the late seventies. The visibility of the programs can thus be seen as part of a long history of efforts by North Carolina's modernizers to bolster the state's image as a forward-looking place.⁶

Accounts of character and context in North Carolina, then, help explain a number of features of the high-tech policies that emerged in the eighties: their emphasis on recruitment and cutting-edge research, their orientation (in structure and purpose) toward modernizers, and their high-

⁶ Once the decision was taken to develop research-based, high-technology programs, there were also compelling practical reasons for building centralized, high-profile facilities in the Park. No universities could afford the kind of expenditure necessary to launch the initiatives undertaken by places like the MCNC; even if they could, arguments from efficiency suggested that duplicating the work would be wasteful (interview with Quentin Lindsey).

profile nature. These are the legacies of over 100 years of industrialization and political response. North Carolina has undergone important economic transitions: from an agricultural economy to an industrial one; from a traditional, labor-intensive industrial base to a broader mix including newer manufacturing and service industries. In the process, the state's industrial mix and per capita income have moved closer to national norms. And political change has accompanied economic transformation. What was a one-party State with minimal, laissez-faire industrial policies is now subject to partisan competition and equipped to act aggressively in support of industrial development. The turn-of-the-century's budding, unorganized business community is now an institutionalized political force, albeit divided on some significant issues between modernizers and traditionalists.

But patterns of continuity persist within these changes. Though the nature of its approach has shifted drastically, the State continues to pursue top-down policies, involving business directly but leaving labor on the outside. The goals of State initiatives and North Carolina's progressive ideology have long included objectives like raising wages and creating jobs, but overwhelmingly the mechanism has been to establish a hospitable climate for industry with the expectation that benefits will "filter down." From the earliest campaigns for industrialization in the 1800's to the drive for diversification in 1950's to the Sunbelt growth of the sixties and seventies, this "filtering" process has been the preferred method of addressing social ills like low wages and poverty. And the chief characteristics of the turn to high technology extend this top-down logic into the present period. It is a pattern that has had important consequences for the outcome of policies over the years.

Patterns amid progress: assessing North Carolina's policies

Although the orientation of high-technology policies towards recruitment, research, modernizer businesses, and high-profile programs has reaped some significant rewards for the state, I will argue in this section that these characteristics have also limited both the economic effectiveness and the social justice of the initiatives.

Four main benefits have arisen from the turn to high technology. First, there have been some direct economic gains from the recruitment of high-tech firms. The Southern Growth Policies Board claims that by mid-decade, the MCNC had attracted \$600 million in new capital investment, created 6000 new jobs, and generated millions of dollars a year in tax revenue.⁷ Indeed, a list of industrial participants in the state's high-technology programs reads like a "who's who" of major technological leaders in the United States. Second, the focus on research has brought North Carolina a top-notch technical community.⁸ A 1990 external assessment of the MCNC concluded: "When we compare the quality of the semiconductor facility and program with those of similar efforts worldwide . . . we conclude that MCNC is as good as the world's best."⁹ Third, the turn to technology has spurred a commitment to improving training and education from primary school through graduate programs. By 1985, North Carolina's training system was among the country's largest in terms of money spent and numbers trained.¹⁰ While the state still faces serious educational problems, the importance of technological development has helped keep school reform high on policy-makers' agenda. Finally, the State's high-tech programs have clearly achieved one

⁷ Whittington and Finger (1986): 75. See also MCNC Community External Review (1990): A-9.

⁸ Finger (1986b): 25.

⁹ MCNC Community External Review (1990): 2.

¹⁰ Luger (1985): 207-8.

of their major objectives: boosting North Carolina's reputation as a center for technological activity.¹¹ In recent years, the Research Triangle has been on the short-list for several national high-technology projects, including the federal government's Supercollider program and two industry-led initiatives, the Microelectronics and Computer Corporation (MCC) and Sematech. While all three ultimately chose locations in Texas, North Carolina's high ranking in these searches indicates remarkable progress.¹² Furthermore, the symbolic commitment to technological advance embodied in the various programs directs the attention of a wide variety of actors -- industry, workers, policy-makers, and citizens -- to the importance of technology in the global economy of the 1990's.¹³

Despite these advances, however, the policies have fallen short of the policy-makers' claims that they would result in huge employment gains, wage growth, and statewide economic expansion. And just as the successes of the programs can be traced to the policies' central characteristics, these shortcomings grow out of the tilt of the programs toward the top-down approach. Criticisms fall into two sets. First, elements of the policies limited the aggregate gains they could achieve in the growth of enterprises and jobs. Second, beneath the aggregate statistics lie great, unaddressed discrepancies between different regions and types of workers.

At the aggregate level, high technology has brought new jobs and businesses to the state, but the numbers fall short of the ambitious claims made by policy-makers in 1980 and 1981. Jobs in the electronics industry increased from 44,000 in 1982 to 60,000 in 1988, raising North Carolina's

¹¹ Whittington (1985): 29-30; Finger (1986b): 25; interviews with Holt Anderson, Paul Essex, and Jim Hunt.

¹² See Durham Morning Herald (18 May 1983): A1; (17 June 1987): A1; (20 January 1987).

¹³ Interview with Billy Ray Hall.

national rank from 15th to 14th. But only a few thousand of these are in the microelectronics industry itself, and North Carolina only ranks slightly ahead of the national average in the percentage of non-agricultural workers employed in electronics.¹⁴

Four explanations account for these lower-than-expected numbers. First, the electronics industry turned out not to be immune to the pressures facing the strategy of recruitment in other manufacturing sectors. During the eighties, semiconductor firms faced increased competition from Japanese companies and went through recessionary periods in which thousands of workers lost their jobs.¹⁵ Furthermore, like other industries, high-technology firms were increasingly wooed by other states as well, heightening competition.¹⁶ Second, even without competition and periodic slumps, there were limits to how many jobs could come out of a push for high tech. Even during its massive period of growth from 1972 to 1982, microelectronics employment moved from representing only 0.2% of non-agricultural employment to a mere 0.3%. Of the ten occupations predicted to grow fastest through 1995, none are high-tech jobs. And trends toward automation and integration in the electronics industry will place further limits on job growth.¹⁷

A third reason why jobs and businesses did not expand more quickly was that the orientation of the policies towards recruitment of branch facilities limited the amount of growth through "linkages." Branches tend to tap into their parent firms' already existing supplier and buyer networks rather than establishing new ones in their own

¹⁴ Durham Morning Herald (16 April 1989): A1; N.C. Employment Security Commission (1988); U.S. Department of Labor (1989): Table B-2; N.C. Department of Commerce (1987-88).

¹⁵ On Japanese competition see Sampson et. al. (1985): 43-6; The Economist (1989): 35; Hof (1990): 72; Brandt et. al. (1990): 54-5. On recession see Whittington and Finger (1986): 75; Hamrin (1988): 359-61; Ingrassia (1990).

¹⁶ Business North Carolina (August 1984): 5.

¹⁷ Sampson (1985): 263-70; Hamrin (1988): 350; Sampson et. al. (1985): 54-6.

neighborhoods. So while policy-makers had some success at bringing branches to North Carolina, the predicted forward and backward linkages have not materialized.¹⁸

Finally, the emphasis of the program on recruitment, high-level research, established modernizer businesses, and high-profile initiatives limited the extent to which the project could spur the growth of small, innovative firms. One commentator wrote in 1989: "For all its success at drawing big-name tenants . . . RTP has sputtered as a start-up engine."¹⁹ A number of factors are cited to explain this lack of entrepreneurial activity, such as inadequate of "seed" and "venture" capital for new businesses that is chronic across the South and the absence of a culture of entrepreneurialism.²⁰ But in important ways, the inability to spur the growth of small firms is built into the policies themselves. Emergent firms lack the resources to participate in programs like the MCNC, which demands sizeable contributions to share the Center's work. The Park is set up specifically for large firms: rules requiring occupants to buy several acres of land and adhere to other restrictions make the cost prohibitive to start-ups.²¹ Furthermore, just as branch plants are not likely to build linkages in the local economy, they are also not seedbeds for the kind of "spin-off" activity characteristic of Silicon Valley. Consequently, Malecki points out: "Promoting local growth through spin-offs would require promoters to shift their emphasis away from attracting branches of large firms."²² The State has not devoted sufficient resources to overcoming

¹⁸ Luger and Goldstein (1989); Goldstein and Luger (1990); Bluestone and Harrison (1982): 90.

¹⁹ Hetzer (1989): 63; see also Adams (1984): 13; Franco (1985): 220-2.

²⁰ On venture capital deficiencies see Adams (1984): 14; Southern Technology Council (1989): 52; Perkins (1988): 21; Jereski (1989): 168. On "entrepreneurial culture" see Adams (1984): 14 and Hetzer (1989): 64.

²¹ See Little (1989): 5 on Park restrictions; on their effect on small firms see Luger and Goldstein (1989 and 1990); Goldstein and Luger (1990).

²² Malecki (1984): 264.

these problems, funding small business development projects at a tiny fraction of big-ticket items like MCNC. And policy-makers have done little to direct these high-profile institutions to aid start-ups. The MCNC's external review in 1990 warned that its programs were too "aloof" vis-à-vis the broader community.²³

Another set of criticisms suggests that the aggregate gains that high-technology programs have made have not been adequately distributed among the state's work force or regions. High technology may create jobs and raise wages in the state, but unless it provides jobs to those workers and areas of the state that are losing employment as a result of broader manufacturing decline, then policies fall short of addressing these fundamental distributive issues. Workers in declining sectors have been particularly hard-hit in the state. From November 1984 to November 1985, the average state lost 1200 manufacturing jobs; North Carolina lost 14,100.²⁴ And in 1985, 40% of textile workers laid off from 1979 to 1984 had not found new employment, and only a small percentage had found higher-paying work.²⁵ That evidence suggests that the training and job creation programs offered by the State are not reaching some of the workers that need them the most. Consequently, the benefits of high-technology employment threaten to accrue only to an upper tier of the work force, raising average wages without pulling up those suffering from dislocation.²⁶ The eighties accordingly saw gaps in income and poverty levels widen along lines of race, gender, and skill levels.²⁷ And though average hourly wage rates increased in absolute and relative terms, they

²³ MCNC Community External Review (1990): A-10.

²⁴ Calhoun (1988): 10.

²⁵ Charlotte Observer (1985d): 8A.

²⁶ See Luger (1985): 216.

²⁷ See Falk and Lyson (1988): Chapter 5; Commission on the Future of the South (1986b): 11-16; Roche (1981): 22; Rosenfeld et. al. (1989): 34; Jackson and Betts (1989): 6; Sher (1988): 11.

remained near the bottom of national statistics at only 80% of the country's average.²⁸

This uneven distribution has a regional dimension as well. The factors high-technology firms consider when they locate new facilities guarantee that most growth will occur in the Piedmont area, part of a long-term trend in the state despite relatively dispersed growth.²⁹ And State high-tech policies that specifically tout the Piedmont worsen the situation.³⁰ Outlying areas find themselves in a vicious cycle. Years of policies aimed at preserving a low-wage, low-skill work force and competing among themselves for external capital have left them vulnerable to economic dislocation and unprepared for the new frontiers of growth. They lack the human and financial resources necessary to revitalize their economies in an era of economic change.³¹ As a result, "non-metro" counties rank far worse than metropolitan areas in per capita income, unemployment, educational levels, job growth, and infrastructural development.³²

The future

These short-comings suggest the need for a new approach to policy, one that focuses on the institutions required to translate the high-profile gains of past policies like big-ticket recruitment and research into tangible, justly distributed economic benefits for the State. A strategy of "growth from within" would de-emphasize recruiting, explore a variety of

²⁸ U.S. Department of Labor (1989); U.S. Bureau of the Census (1987): Table 649.

²⁹ On the locational advantages of areas like the Piedmont, see Hekman and Greenstein (1985): 171; Malizia (1985): 184-5; Sampson (1985): 276-7; Rosenfeld et. al. (1985): 2; Falk and Lyson (1988): 132; MDC (1986): 7.

³⁰ See Luger (1985): 215.

³¹ On the barriers to revitalization in "non-metro" counties see Rosenfeld (1985 and 1989); North Carolina Rural Economic Development Center (1989); J. White's comments in Applebome (1989); Falk and Lyson (1988) and Lyson (1989).

³² See North Carolina Rural Economic Development Center (1989): 2-10; Calhoun (1988): figures 14 and 15; and the previous footnote.

mechanisms for spawning locally based businesses, focus attention on labor issues like retraining and representation, and generally attempt to broaden the range of participants in the development of policy. Such measures would help ensure that policy-makers did not rely on gains' automatically filtering down to workers and regions in need of new opportunities. Resources would be targeted to groups and areas most in need of assistance.³³

In the absence of the right political environment, however, these kinds of proposals face an uphill battle. One instructive example is a report put out by the Hunt administration in 1984.³⁴ The task force that published it included a wide range of interests, adding labor, educators, and community leaders to the traditional State-business-university partnership. And the study grappled with the very issues of aggregate and distributional problems discussed above, and recommended a number of initiatives that resemble a "growth-from-within" approach to solve them. In addition, Hunt himself made several remarks in his second term stressing the need to focus specific attention on spreading the gains of high technology through small business growth and wider participation in programs.³⁵ And since the birth of the high-technology initiative, there have been murmured questions about whether gains would be distributed across the state and whether organizations like MCNC were accountable enough to the public.³⁶ But throughout his time in office, Hunt placed

³³ For proposals representing different kinds of "growth from within" strategies, see MDC (1986); Southern Technology Council (1989); Lyson (1989); Sher (1988); Vass (1982); North Carolina Rural Economic Development Center (1989); Rosenfeld et. al. (1989); Commission on the Future of the South (1986b); Luger (1984).

³⁴ N.C. Governor's Task Force on Science and Technology (1984). See also Nyrop (1984).

³⁵ See for example, his speeches "Academia, industry and government: the organizational frontier of science today" (Hunt [1987]: 196-207); and "University-industry-government interactions: the importance of guiding principles" (Hunt [1987]: 271-280); and his comments in Business North Carolina (December 1983).

³⁶ See Durham Morning Herald (4 February 1983, 11 April 1983 and 17 April 1989); Durham Sun (7 April 1983).

overwhelming financial and personal emphasis on policies oriented toward recruitment, research, established modernizer businesses, and high-profile projects. Although some of the task force's "growth-from-within" ideas, like small business development programs, secured State funding, these measures continued to be dwarfed by big-ticket items. As I have argued, these top-down strategies came to the fore because of the political patterns leading up to and developing within Hunt's governorship. A change in strategic emphasis would require a change in the political framework that provides the foundation for the top-down approach.³⁷

Is such a shift foreseeable in North Carolina? The analysis in this essay suggests that patterns persist through times of great change once they are institutionalized. But the story also reveals that transformations do occur when economic and political conditions make them possible. And the current period may provide such a moment. Since 1984, Republican Jim Martin has held the governorship. Significantly, he has adopted most of the State's traditional mechanisms of economic development, including recruitment and research-oriented projects. In this rare period in opposition, the Democrats thus have found the need to carve out an alternative space on the question of industrial policy, and many of their initiatives have resembled "growth-from-within" strategies. Lieutenant Governor Bob Jordan, de facto leader of the Democrats during Martin's first term, set up a North Carolina Commission on Jobs and Economic Growth whose report provided the basis for several actions of the Democrat-dominated 1987 General Assembly.³⁸ The legislature rejected Martin's proposals to increase funding for the State's Tokyo office and the

³⁷ Kenneth Dolbeare writes: "No analysis, program, policy or transformation can be merely economic. Economic transformation and renewal are also, and equally, political transformation and renewal." (1984): 1.

³⁸ N.C. Commission on Jobs and Economic Growth (1986 and 1988); for a comparison of Martin and Jordan's stances, see Finger (1987).

recruitment of film companies, opting instead to create the Rural Economic Development Center (NCREDC), establish a \$5 million fund for public improvements in rural areas, and allow the State treasurer to invest public revenues in venture capital funds.³⁹ The 1988 Assembly set up the North Carolina Enterprise Corporation to provide mezzanine financing for independent North Carolina businesses in rural communities and allocated \$500,000 as a loan fund for "micro-enterprises" and \$1,750,000 to ease the capital shortage faced by minority-owned businesses.⁴⁰ A variety of programs combining State and private funding have been launched to foster rural school-based small businesses, cooperative networks between small firms, technical assistance, and numerous conferences bringing together leaders from a broader cross-section of the community than traditional state policies have.⁴¹

Still, these measures to date have not constituted a comprehensive initiative for "growth from within." Furthermore, they have supplemented rather than superceded older policies. For example, the 1987 General Assembly appropriated over \$8 million to aid in the recruitment or expansion of three large firms, only one of which was considering locating in a high unemployment area. That figure was double the allocation for the rural development center.⁴² And the political future of new approaches is unclear: Jordan lost the 1988 governor's election to Martin, and recent legislatures have faced extremely tight budgets. In addition, high-technology programs in their current top-down form have accumulated a degree of institutional momentum of their own. It is possible that after a hint of change, the State's industrial policies will

³⁹ Business North Carolina (November 1987); Perkins (1988): 18; Hetzer (1989): 66-8.

⁴⁰ N.C. Rural Economic Development Center (1989): 14-6. Some of these proposals were the result of the Center's first year of work.

⁴¹ See N.C. Rural Economic Development Center (1989): 12-31, for the projects involving the Center itself.

⁴² Luebke (1990): 82-3.

stay on their long-followed track of top-down development. As another era of economic and political change matures, North Carolina's displaced workers and depressed areas may be left waiting once again.

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Ed Bishop	Special Assistant to the Provost, University of North Carolina, Chapel Hill	18 January 1990
Charles Dunn	Former President, North Carolina Textile Manufacturers Association	1 February 1990
Paul Essex	Former Special Assistant to Governor James Hunt for Intergovernmental Affairs	29 August 1989
William Friday	Former President, University of North Carolina; President, Kenan Fund	1 February 1990
Billy Ray Hall	Former official in Policy Development under Governor James Hunt; President, N. C. Rural Development Center	29 January 1990
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Quentin Lindsey	Former Science and Public Policy Advisor to Governor James Hunt	29 August 1989
Jim Newlin	General Assembly, Fiscal Research Division	6 September 1989
Betty Owen	Former Education Policy Advisor to Governor James Hunt	7 September 1989
Gary Pearce	Former Press Secretary, Governor James Hunt	29 August 1989
Chris Scott	AFL-CIO; Former official in Policy Development under Governor James Hunt	1 February 1990

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