

THE TENTATIVE LEAP FORWARD: REFORMS AND EXPERIMENTS IN BASIC
LEVEL CHINESE INDUSTRIAL MANAGEMENT POLICIES, 1977-1979

by

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ABSTRACT

This thesis addresses two major topics. The first is the changes in national policy concerning basic level industrial management which accompanied the change in political leadership in the People's Republic of China after the death of Mao Zedong. This paper examines the nature and extent of such policy changes at a national level during the period 1977-1979. Secondly, this paper seeks to identify basic level industrial management policies formulated at a sub-national (generally provincial) level which differed in either timing or policy content from those being promoted nationally.

The primary source of reference material for this thesis is the compilations of transcriptions of national, provincial, and local radio broadcasts and announced periodical articles published by the Foreign Broadcast Information Service. Approximately 750 daily reports published during the years 1977-1979 were examined in order to compile both accounts of relevant policy changes at the national level and discrepancies among policy descriptions and developments at the provincial and local levels. These materials were supplemented by numerous articles by outside observers, in order to provide additional information and a broader perspective than that offered by the Chinese government-originated material.

The paper identifies two distinct categories - organizational reforms and the reintroduction of material incentives - of major

changes in the policies of management of individuals, collectives, and industries during this period, in order to improve productivity. Details of the evolution of these policies and their presentation in the Chinese media are given. The paper then examines variations in these policies among different provinces and areas, and identifies three areas - Sichuan province, Guangdong province, and the major cities of Shanghai, Beijing, and Tianjin - where reforms tended to be more progressive than in the country at large and might serve as models or experiments in new policies being considered for national adoption.

Finally, managerial policies promulgated during this time are reviewed and analyzed for their ability to meet the needs of the rapid industrialization desired by Chinese leadership. Three potential difficulties are identified: the political opposition of some factions to new or broader reforms; problems in the reconciliation of a greater role for market forces with the needs of a centralized, planned economy; and the difficulty in adapting or revising the present strategy to accommodate changing or unexpected circumstances.

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I. INTRODUCTION

The year 1976 was, as the Chinese media was fond of repeating, an extraordinary one for the People's Republic of China. Within that year, three of China's great revolutionary leaders - Mao Zedong, Zhou Enlai, and Zhu De - died; one of the deadliest earthquakes in recorded history devastated parts of North China, killing perhaps 800,000; and the struggle for political succession, openly erupting upon Mao's imminent death, resulted in the ouster of the leftist Gang of Four and the beginning of a drift toward less radical economic development policies.

The vastness of China's economy itself precludes rapid and dramatic changes. The post-Mao leadership was further constrained in its desires for reform by the necessities of continuing

political gamesmanship and power consolidation. Policy changes in the following years, while a graphic departure from the recent past, were still more tentative and isolated than many might have liked.

Nonetheless, important shifts occurred in Chinese economic developmental policy in the years 1977-1979. Beginning with the consolidation of power in early 1977 by the new leadership, the reliance of the previous ten years upon capital construction and ideological correctness as means of development gradually fell into disfavour. Renewed emphasis was instead placed upon the reintroduction of material incentives and the stressing of organizational efficiency, based upon policies pursued prior to the onset of the Great Proletarian Cultural Revolution in the mid-1960's. By late 1979 policy changes or experimental ventures were in place which have largely formed the base for Chinese policy to date.

This paper will focus specifically upon post-Mao changes in managerial policies in one sector of the Chinese economy: basic level industrial production. This sector is crucial, not only in China's efforts to become a fully modern, industrialized country by the end of the century, but also in examining the possible usefulness or appropriateness of current and future general developmental policy. The paper is divided into four sections: an overview of China's industrial managerial problems at the start of 1977; an examination of industrial management and income distribution policy changes in the period 1977-1979; a description of local experiments and variations upon national

policy, including experiments which might serve as models or preludes to future national policy; and a concluding section examining the limitations and future developmental potential of policies described.

II. INDUSTRIAL MANAGEMENT PROBLEMS - 1977

The most basic requirement of China's economy is that it be able to feed its billion people. At the start of 1977, this task was the nearly exclusive propaganda focus of China's efforts to increase production. Standard exhortations were to take agriculture as the key link in the development of the national economy; that development efforts were to be directed to agriculture first, light industry second, and heavy industry third; and that the primary purpose of industry should be to serve agriculture.¹

Within industry, emphasis was laid upon products necessary in agriculture, such as chemical fertilizers, farm tools, and machinery. These industries were, in turn, handicapped by inadequate iron and steel production, coal extraction, and transportation. Iron, steel, and coal production all fell in 1976, and were acknowledged at the start of 1977 to be weak links in the industrial chain. Massive publicity campaigns to improve efficiency and reduce waste in transportation, generation and consumption of electricity, and production of iron, steel, and coal emphasized the need for improvement in these areas as vital to the growth of industry in general.²

The coal industry, responsible for 70% of China's energy

production, was particularly weak; less than one-third of the industry was mechanized, many deposits were of low quality, and most high-grade deposits were concentrated in the north. This regional concentration in turn placed pressure upon an overburdened and inadequate transportation structure; 40% of all Chinese railroad cargo was coal. The additional inadequacy of hydroelectrical facilities combined to produce chronic power shortages, which were a major constraint upon industrial capacity and future expansion.³

Policies of the previous Chinese leadership had also left constraints upon potential industrial growth. The political turmoil, not only of the 1975-1976 power struggle but of the previous ten years dating to the beginning of the Cultural Revolution, had taken its toll. In that period management, organizational, and production policy and leadership were selected largely on the basis of political correctness rather than their contributions to greater economic development. This encouraged the promotion of policy and of decision-makers emphasizing ideological policy content, often at the expense of economic rationality. The heritage was a plethora of managerial difficulties in industry, a shortage of trained managerial manpower, and a class of cadres and managers who, promoted and empowered under the guidelines of the Cultural Revolution, were disadvantaged by reform efforts and formed a major base of political power, patronage, and potential opposition.

A number of organizational and planning difficulties hampered industrial productivity. Prior policy, through much

of the PRC's history, had emphasized the equal development of industry through all provinces. Emphasis upon local self-reliance encouraged the proliferation of small plants, each equipped to manufacture a variety of products. Industrial facilities were thus needlessly duplicated through many provinces, and established with little regard to proximity and availability of either raw materials or markets. Specific local industries were unduly affected by small production variations in raw materials supplied by other local industries; the small scale and variety of products one plant might be responsible for also resulted in under-utilization of equipment.

The large number of different sites in China manufacturing the same product made standardization of any one product virtually impossible. Similar goods from different regions, provinces, or even counties were often not interchangeable, making the repair or replacement of machine parts an unnecessary challenge. Excessive duplication and lack of standardization in manufacturing efforts were also encouraged by a high degree of vertical integration in the planning of output. Planning efforts were coordinated by administrative region rather than by product; thus, targets were often determined with little or no reference to coordination with similar enterprises under different authority.

Geographic isolation in planning and the push for local self-reliance also resulted in chronic problems of stockpiling and large inventories. To local managers, these inventories represented secure supplies in the event of bottlenecks in the production of raw materials or supply to consumers; this was

seen as more desirable than dependence upon uncertain supplies from outside the local area. The prior emphasis upon local rather than provincial or regional self-sufficiency in an industry meant that managers were loathe to count upon material imports from other areas, and in turn tended to view their primary obligation as fulfilling the needs of their local markets, regardless of the economic inefficiencies involved. The large inventories kept also served as a protection against sudden revisions in output targets.

The lack of useful contact between product designers, producers, and consumers often led to insufficient awareness of producer or consumer needs, and therefore production bottlenecks and sudden planning changes. In short, the planning of output targets for local industries often was conducted without proper consideration of larger regional or national needs, or the needs of related local industries. Overlapping planning authority between national, provincial, and local officials compounded the confusion and inefficiency.

Another set of managerial problems related to the limited authority and motivation for independent action given local plant managers. With the performance of managers judged independently of the performance of areas under their authority, there was no particular reason for managers to attempt innovative (and possibly politically dangerous) reforms to improve efficiency or productivity. To the extent that plant productivity was considered, the emphasis upon local planning and the meeting of local output targets often worked against the larger productivity of

the industry (for example, the recurrent stockpiling of inventory was rational to a local manager but inefficient on a larger scale).

Managerial input into the planning process was also limited. Plant influence upon the future production levels expected of it was often confined to the slacking off of production, and overconsumption of raw materials, at the end of the annual fiscal cycle, so that future allocations (based upon annual consumption and production figures) would include adequate raw materials and minimize future required production increases. Local initiatives were made more difficult by the "three-in-one" system of joint plant management by workers, cadres, and managers, and the resulting politicization of management decisions. The political struggles of 1975-1976 were thus directly carried into local industrial management, disrupting at times both plant management and production. Motivation of plant workers was dependant upon appeals to socialist morality, and lack of discipline among plant workers was a serious problem. The legacy of this politicization was a reluctance by managers to embrace the post-Mao reforms which began in 1977, fearing them to be yet another short-lived political movement which would do more to disrupt than to increase long-term production.

The low productivity of Chinese industry, an outgrowth of planning and organizational problems, was compounded by systematic investment in new facilities as the primary method of increasing output totals. An unusually high investment ratio of capital expenditures to output, especially in heavy industry,

reinforced productivity inadequacies. Moreover, the planning of such facilities often suffered from the same short-sightedness and regionalism as the production planning for existing industries and facilities.

III. NATIONAL POLICY 1977-1979

The inadequate capacity of infrastructural industries, and the barrier it posed to industrial growth, was recognized and reflected in the Ten Year Plan for 1976-1985, released early in 1978. Most of the planned capital construction (largely to be financed by the import of foreign capital) was in the infrastructural sector. 95% of overall industrial capital investment was to be in heavy industry, and only 5% in light industry.⁴

The construction goals proved to be overambitious, and too reliant upon a few large scale projects depending upon sufficient foreign currency exchange for their completion. Thus, in early 1979 the goals of the Ten Year Plan were revised downward. Large capital construction projects were postponed; the revision included curtailment of foreign purchases directed toward large-scale infrastructure projects. In its place was a reemphasis upon light industrial development, at the expense of funds for heavy industry, in order to generate additional foreign exchange through exports. By the second session of the fifth National People's Congress in May 1979, Chairman Hua acknowledged that for the following years China would have to rely upon its existing industrial facilities in its efforts to achieve growth and

modernization. Being unable to expand its facilities, the state would have to depend almost wholly upon efforts to increase productivity in existing enterprises.⁵

At the start of 1977, efforts to increase productivity were centred about a drive to emulate the national model of Daqing, a large oil-producing complex in Liaoning province. The process of learning from Daqing placed emphasis upon correct political ideology, cadres and workers who were Red before expert, and determination to increase production as the keys to industrial achievement. Another model, the constitution of the Anshan Iron and Steel plant, also emphasized political education and egalitarianism in organizational and wage policies. Over the following three years, these policies underwent fundamental revisions. By the time of the second session of the fifth NPC in 1979, Anshan was but a ghost of models past. While the drive to learn from Daqing was still acknowledged, the items to be learned had either been deemphasized or reversed. The newly popularized slogan was a decided departure from the old: "Practice is the sole criterion of truth."⁶

Among Hua's initial efforts after the downfall of the Gang of Four was to promote policy stability in the industrial sector. The defense of "rational rules and regulations" and the gradual restoration of managerial expertise as a policy guide supplemental to ideological correctness were intended to enhance the new regime's political stability at the expense of past radical policies. The aim was to end the deliberately induced "continuing revolution" of political (and economic) instability that had

marked the previous eleven years, and provide reassurances of the permanence of new policy. A campaign was mounted to combat endless meetings, political forums, and bureaucratic delays. Reduced hours of political study in factories served to concentrate more working hours upon production tasks and to deemphasize ideology as a prerequisite for production. By 1979 calls surfaced for the complete abolition of enterprise political departments.⁷

Cadres, managers, and workers, having survived the tumultuous Cultural Revolution, were cautious to embrace new reforms lest they be repudiated at some future date. Thus, throughout the period 1977-1979, even as policies continued to change and evolve, broadcasts repeatedly trumpeted the permanence and continuity of current and future edicts. Credibility in keeping such promises was (and remains) a crucial factor in generating the necessary trust and enthusiasm to implement reforms and to strive for still greater production achievements.

Managerial policy changes implemented during the period 1977-1979 had two major goals which, it was hoped, would raise the productivity of existing enterprises. These were: 1) organizational reforms, meant to streamline and increase the efficiency of planning, factory administration, and operations between and within plants, locales, and industries; and 2) material incentives, designed to heighten enthusiasm and (therefore) productivity among workers and their collectivities.

The ideals of decentralization and self-reliance, employed during previous years in the promotion of agricultural mechanization and the manufacture of farm machinery, had led to numerous

major organizational problems. With the priority given to agricultural mechanization in the national developmental effort, the machine-building industry was the first to undergo massive organizational reforms on a regional and national scale.

Calls began in early 1978 within the machine-building industry for the active promotion of greater plant specialization. This was cited as having advantages of the use of fewer machines, less frequent retooling, greater ease in training operators, longer machine life, and easier standardization within factories and among related ones.⁸ A month-long national mechanization conference in January 1978 cited the favourable example in Shandong of implementing responsibility among different plants for the manufacture of different, coordinated items on a centrally planned mass scale.⁹

Vice Premier Yu Qiuli's report at that conference, touting "unified planning," included several notable demands: 1) making the various types of machinery simple, standardized, serialized, and multipurpose; 2) employing "specialized cooperation" on a provincial, regional, or national basis by encouraging small plants to manufacture single, specified types of goods in coordination with larger plants producing a variety of items on a mass scale; 3) promoting in production management the "five fixes" of fixed orientation for products and scale of production; fixed personnel and organization; fixed consumption quotas and sources of supply for raw materials and fuel; fixed assets and circulating funds; and fixed cooperative relationships; 4) with the recognition of inferior quality products as "a prevalent

problem," having stricter quality control and implementing regulations to discount products of unacceptable quality from credited production totals; and 5) coordinating production of complete sets of farm machinery, including spare parts, to be made available to consumers.¹⁰

By late 1978, much of the farm machinery industry had in fact been reorganized to implement specialization and coordination by "1) Setting up specialized companies or general factories to end overlapping leadership and diffuse management; 2) Regrouping factories according to the types of products they produce; and 3) Undertaking technical reformation to raise the technical level of products needed in large quantities."¹¹ These actions resulted in "small, locally managed plants absorbed into local or regional networks featuring large-scale specialized production and assembly."¹² The Daqing model of local self-sufficiency was thus abandoned even while the calls to learn from Daqing were still intact.

Calls for greater coordination in planning within industries, and among related ones, followed in other industrial areas. The campaign criticized the use of "administrative boundaries of local government as basic units for integrating supply relationships among enterprises and between sectors in a locality,"¹³ calling instead for unified, interprovincial planning and greater producer-consumer contact in all industries.¹⁴ Further campaigns began to encourage coordinated planning across prefectural and county administrative boundaries as well.

At the same time, steps were being taken to facilitate more centralized, coordinated planning. Without fanfare, the May 1977 national Learning from Daqing conference restored the use of six large economic regions as an interim (between provincial and national) level of economic planning. The regions were to facilitate a greater coordination of production efforts in all industries between neighbouring provinces, in an effort to reduce waste and duplication. By May 1978, reports appeared of these regions having spawned "regional economic planning forums" for such purposes. The practice of designating key industries and enterprises had been revived as well, to assist the regions in correctly assigning priority to and implementing new reforms.¹⁵

As a further effort to avoid bottlenecks, combat illicit stockpiling, and plan more effectively, formal contracts were instituted between factories supplying each other with goods. Rather than the informal arrangements that had previously characterized such dealings, supplies were to be arranged and contracted for in advance and incorporated into the state plans specifying the allocations of raw materials given to individual plants.¹⁶

Nevertheless, tremendous difficulties remained in gaining increased productivity through planning and organizational reforms among industries. Inertia and empire-building among overlapping and interlocking bureaucracies continued to hamper efforts to coordinate planning. The dependence upon set annual quotas (a later target of reform), which must be met at the end of the year, left individual plants suspicious of state planning

and prone to stockpile raw materials in order to avoid suffering during the inevitable year-end rushes and bottlenecks. The annual year-end production surge, then, would come at the expense of production during the remainder of the year. Allegations also appeared that such bottlenecks were the result of illicit, extra-legal sales of supplies for the personal gain of managers.¹⁷

China's efforts to maximize production in a given industry have also been hampered by the conflicting goal of bringing industry and modernization to relatively unindustrialized areas of the country. Such regional investment has often been at the cost of loss of proximity to raw materials and dependence upon an inadequate and overworked transportation system. Moreover, provinces and lower levels of administration had incentives to promote local industry even if it was uneconomic and detracted from the larger national effort; the taxes generated by even inefficient enterprises represented additional revenue to the state, the jobs created were attractive items for political patronage, and the items produced represented secure local sources of supplies for other industries and consumers rather than less dependably available imports.¹⁸ Thus industries were forced to combat tendencies toward production scattered and duplicated within and among provinces without relation to location to either raw materials or markets.

Similar structural inefficiencies, such as overlapping departmental authorities and a lack of centralized planning, also became targets for intra-plant reform during 1978. The

employment of professionalism and managerial expertise to increase local productivity was once again hailed as desirable. Campaigns developed to streamline plant bureaucracies, minimize the incessant holding of political meetings which cut into productive work time, and reassign "non-productive" administrative labour to more directly productive jobs. By the time of the fifth NPC's first session in March 1978, calls emerged for the abolition of the politically oriented Revolutionary Committees. The Revolutionary Committees controlled and managed plants during the Cultural Revolution, and gave workers and party cadres substantial direct roles in factory management. They were to be replaced by professional factory management committees acting under the leadership of the local party committees, with managers taking direct individual responsibility for their factory's performance, and their assistants likewise for specific areas within the factory. Managers' authority to oversee production, enforce discipline, and negotiate external contracts was also increased, and the access of workers to plant management severely reduced.¹⁹

The calls for managerial efficiency and accountability continued throughout 1978-1979, with the rallying cry of "practice is the sole criterion of truth." By early 1979, broadcasts and articles were not only admitting interest in the experiences of other socialist countries, such as Yugoslavia and Rumania, but were also scrutinizing such managerial techniques as specialized cooperation within and among plants, high wages as incentives to productivity, management training programmes, and quality control

programmes, imported from such capitalist countries as Japan and the United States.²⁰ Some areas also began promotion in 1979 of contracts between separate divisions within a given factory. These were intended, much as contracts between enterprises had been, to insure the steady and regulated flow of materials from one department to another.²¹

In mid-1978, the Chinese government initiated a step to increase productivity by encouraging local plants to search out qualified personnel with prior, specialized training, and insure that they were working at jobs fully employing their skills. Many areas were suffering a shortage of properly trained manpower, due to the emphasis upon political education during the Cultural Revolution and the reassignment during that period of many trained workers to unskilled or irrelevant jobs; it was hoped that the reassignment of these "hidden" skilled workers and managers would help address the lack of trained workers, help in the training of new workers, and increase managerial efficiency.

However, this directive was also partially ensnared in bureaucratic obstructions, such as current units that did not want to surrender efficient workers, workers not wanting particular assignments, political patronage, and competition for choice reassignments. Nearly two years later, implementation was still proceeding slowly; an early 1980 Guangdong broadcast complains of transfer delays because "their present units will not let them go...units to which they should be transferred

stress that it will not be easy to solve the problem of registered permanent residence, or else are unwilling to accept them on the ground that there is no housing available. Some (cadres) are unwilling to go because they do not like the new units or their locations."²²

Another step to improve the technical efficiency of plant workers was the 1977 reemphasis upon July 21 schools. These on-site "schools" were similar to political schools established during the GPCR, but were to be used for an opposite purpose: the provision of rapid, job-oriented technical training accompanied by a minimum of political study. Labour recruitment procedures were also revised, with the reinstitution in many places of merit examinations to replace political favoritism and nepotism as methods to determine promotions and the hiring of new workers.²³ Despite these efforts, there were still problems of overstaffing and inadequately trained workers. In particular, the shortage of existing trained personnel and the need to train workers rendered overstaffing problems virtually insoluble; managers capable of resolving such manning situations were more urgently needed for other tasks.²⁴

By early 1979, in a further effort to promote increased productivity, experimental plants nationwide were being given greater local autonomy in conducting experiments in organization and worker motivation, planning enterprise acquisitions, and importing foreign equipment. At the same time that the state was attempting to tighten its centralized planning and more

efficiently coordinate production, enterprises earned the right to reject planning targets they thought unfeasible. They were given greater freedom to use whatever means they thought necessary to achieve the state's targets, and broadcasts were heavily publicizing enterprises' experiences in self-management.²⁵ The limited measure of managerial autonomy thus granted local enterprises was mainly confined to the determination of ways to meet goals previously either set or delimited by state planners. The goals themselves were less negotiable; the extent to which they were negotiable detracted from the state's efforts toward greater centralization of planning.

Beyond organizational reforms, the period 1977-1979 also saw a national reemphasis upon material incentives as a policy used in the hope of stimulating worker productivity. The first step in this direction was the October 1, 1977 pay increase of about 10%, affecting roughly 64% of all non-agricultural workers; it was only the second such substantial raise in the 28 years of the PRC. The raise involved both increased wages for particular grades of jobs, and mass promotions to higher grade job grades; targeted beneficiaries were said to be those lowest on the pay scale, plus senior and skilled workers underpaid during the Cultural Revolution.²⁶ The raise, according to the government, was made possible by increased state revenues owing to increased production in the year since the downfall of the Gang of Four. The clear implication was that if production continued to increase, so, too, would wages.

A campaign began in mid-1977 to popularize the "equitable"

usage of work point systems in allocating worker incomes. Broadcasts urged that the accumulation of work points, through which worker salaries were determined, be based more directly upon the productivity of individual workers.

In August 1977, a remarkable debate, unthinkable a year before, was published in the Guangming Daily. The article examined, without drawing conclusions, the questions of: 1) the difference between "distribution according to work" and "material incentives," and 2) whether the implementation of "distribution according to work" would create bourgeois elements in society.²⁷ By the end of the year, the newspaper had resolved the questions. A November article advocated the concept of "from each according to his ability, to each according to his work" as a Marxist concept distinct from material incentives; the concept of bonuses as distinct from "putting bonuses in command"; and piece wages as a simple and justifiable variant of time wages.²⁸ By the spring of 1978, upon the heels of the National People's Congress, the drive within China to implement "to each according to his work" and to restore bonus and piece rate wages was universal. This restoration was, in part, intended to bolster efforts toward greater coordination and centralization in planning; it was hoped that by rewarding hard work with bonuses and additional income, energies otherwise devoted to private, household sideline occupations or corruption would instead be channeled into the collective enterprises.

As incentives were introduced, so, too, were individual

disincentives. Piece work wages also served to punish the non-productive. Pay reductions were also employed as a disciplinary measure against low production or poor quality control. In situations where the payment of bonuses was widespread and came to be expected as part of the basic wage, their denial could also serve as a type of disincentive. The message accompanying the "to each according to his work" campaign was clear: those who met or overfilled their production quotas would, in addition to the primary motivation of moral rightness, also receive proper material recognition. Those who did not produce would be punished accordingly. Toward the end of 1978, broadcast reminders that bonus and wage incentive systems were only secondary methods of worker motivation gradually disappeared.

Further wage increases and bonuses were instituted in 1979, in a redoubled effort to increase productivity. Maximum allowable bonuses were increased, and piece work rates were tied directly to rises (or falls) in output, in order to link more directly overall income rises to increased output. Bonuses were also offered for technical innovations by workers, and even to translators of foreign technical books. Promotions were to be based more upon a worker's proficiency than his seniority.²⁹

The programmes of individual incentives have also been partially hampered by bureaucracy and the norms of the past. Mutual criticism sessions and work attitudes, as well as output performance, were used as criteria for the accumulation of individual rewards. Thus, favouritism, for political or social

reasons, continued to be an important determining factor in gaining promotions. This was compounded by the recurring tendency among managers to distribute bonuses evenly regardless of merit, particularly due to social pressures.³⁰ In the Chinese press, such "egalitarianism" came under repeated attack throughout the period, indicating that it remained a problem. In late 1979, a point system to determine bonus allocations was instituted by some enterprises to combat these problems. By awarding workers set numbers of points for particular accomplishments, and allocating bonuses on the basis of point totals, the discretion of managers in arbitrarily awarding bonuses was reduced.³¹

The incentives themselves were thought by some to be insufficient to spur workers to greater productivity. Workers were often reported (usually by the Western press, but occasionally by the Chinese as well) as impatient with the slow pace of reforms. The Chinese government seemed to share this opinion, but was constrained politically from moving too rapidly in inducing large wage inequities; the question was still a source of disagreement and factionalism among government leaders.

Collective incentives were also being instituted for Chinese factories. Units showing greater productivity were to be rewarded with greater autonomy in their own planning and allocative decisions. Price rises of some raw materials and finished goods, "to reflect their demand and their importance," were also allowed.³² The move was designed to utilize increases in

collective income as a further spur to production.

The July 1978 issuance of the "Thirty-point decision on industry," including the standard of the "five guarantees" as production goals, effectively supplanted the long-standing, egalitarian national model of enterprise management, the Anshan Iron and Steel Plant Constitution. The decision codified and formalized production incentives, for both collectives and individuals, as the national ideal:

"Under this system, the state would designate fixed quotas for each enterprise with respect to output, personnel and organization, raw materials, capital assets, and the amount of liquid capital. In return, the enterprises would submit five guarantees to the state with regard to quality and quantity of product, total wage bill, costs, expected state profit, and the life span of major equipment. Enterprises overfulfilling their five guarantees would be entitled to retain a portion of the planned profit as a bonus fund..."³³

The "five guarantees" thus served as a sort of contract between the enterprise and the state, attempting to deal with many of the concerns (e.g., poor quality control, supply of raw materials, etc.) that had previously hampered productivity. Bonuses were also codified, as rewards for overfulfilling production. Anticipated bonuses were to be calculated as part of the total budgeted wage bill.

It is less clear whether, as with individual incentive programmes, proposed corresponding disincentives for poorly performing enterprises were fully implemented. A January 1978

Red Flag article, while advocating the "to each according to his work" doctrine, also urged readers to "use price laws to serve socialism" in making the logical extension that, as productive units are rewarded, nonproductive ones ought to be punished.³⁴ References later became common to the concept of phasing out hopelessly nonproductive units, or merging them with more acceptable ones.

Whether such sanctions were actively pursued during the 1977-1979 period is unclear; the actual logistics of closing down an uneconomical operation were never publicized. The Chinese system places a heavy emphasis upon job security, in some cases even allowing positions to be passed on to children. Managers have shown extreme reluctance in following directives even to fire unproductive individuals.³⁵ The prospect of closing down an entire enterprise would mean either doing so at the cost of assuming the burden of reassigning the workers to other enterprises which may not want or be able to accommodate them; or allowing the dispossessed individuals to fend for themselves upon a job "market" made possible by granting limited autonomy in hiring to local enterprises.

Any sort of an open job-market in the Chinese economy carries enormous risks. As in most underdeveloped countries, the desire for migration to urban areas is great; despite severe housing shortages and urban unemployment, it is stemmed in China only by the government's enforcement of very limited job mobility. The average income of urban workers is twice that of rural ones,

and those living in the cities enjoy innumerable cultural, educational, and political advantages. Moreover, since the average income in rural areas is closer to the subsistence level than that in urban areas, there are fewer opportunities for large wage differentials in rural enterprises and for large bonuses to hard, productive workers.³⁶ With the previous emphasis upon rural development, and its corresponding duplication of industrial facilities, a disproportionate number of the "non-productive" enterprises were rural ones. As a result, the pursuit of one type of incentive programme (urban factory incentives) led to greater dangers and imbalances in the pursuit of another (the disincentive of threatened closure of unproductive rural enterprises).

While production incentives were being slowly introduced, the standards by which production was judged were also evolving. As in other managerial endeavors, the political correctness of a collective's actions became less relevant, superceded not only by the imperative of meeting physical production quotas, but also, increasingly, by financial accountability.

The deemphasis upon political activity in industrial production was rapid. Soon after the beginning of 1977, broadcasts began demanding the implementation of whatever steps were necessary to increase production and meet the demands of rapid development and growth. An August 1977 Red Flag article stressed "reasonable profits" by enterprises as desirable, as long as they were "not in command" as the major motivator for increased

production. This signalled the start of a further campaign to urge enterprises to control their financial management more strictly and thus remit profits to the state rather than draining it of subsidies. By the February 1978 National People's Congress, Chairman Hua was able to specify the idealized goals of enterprise management as efficiency and accountability - goals related to the accumulation of socialist profit as well as the fulfillment of physical output quotas.³⁷

The "Thirty-point decision on industry," issued in July 1978, included eight "economic and technical norms for the evaluation of industry." These were: quantitative output; product mix; quality; raw materials, fuel, and power consumption; labour productivity; costs; profits; and working utilization capital.³⁸ The implementation of this and the "five fixed quotas" and "five guarantees" systems came as a watershed in income distribution policy. Both quantity of product and the generation of state profit were included as guarantees; overfulfillment of the guarantees was tied to the reward of a fixed percentage of the profit. Thus both the judgement of an enterprise's performance and the incentive used to encourage high performance were related to the cost efficiency and financial management of the enterprise, rather than strictly towards meeting a physical production quota imposed by the state. Of all the various targets enterprises were asked to meet, the profit target had become the most important, backed by the most incentives, the most punishment for failure in meeting state targets, and, in much of 1979, the most propaganda

efforts in broadcasts designed to encourage enterprise performance.

At the June 1979 NPC, Chairman Hua's work report, in noting that nearly one-fourth of state industrial enterprises were still operating at a loss, stated that those still in the red would be given one year to turn a profit or close down.³⁹ As the percentage of locally run enterprises losing money and requiring state subsidies was estimated to be far higher,⁴⁰ it was unclear whether such severe sanctions were also to apply to non-state-run plants, or (as noted earlier) what the mechanisms of closures of plants or departments, or of individual firings, as penalties for nonproductivity might involve. One source indicates that in 1979 2400 factories with unsatisfactory records "changed to other products, merged with other factories, or ceased production altogether," without distinguishing among these actions or detailing their consequences.⁴¹ Specific closures were not publicized, suggesting that the threat of such sanctions was also intended as a spur to motivate non-profitable units, rather than simply as a flat statement of policy. A simultaneous move to "reduce or eliminate the industrial and commercial taxes for poorer (local) enterprises"⁴² also suggests a reluctance to enforce the threatened closures.

Increased autonomy and conversion to profitability as a standard of performance combined to create a situation in which "profitable enterprises might be permitted to retain an increasingly large share of the profits if they demonstrate effective

use of these funds."⁴³ This implies a great variety in the amount of autonomy given specific industries. Fixed prices for raw materials, some higher than their actual value (such as agricultural commodities) and some lower, can affect the profitability of entire industries in ways totally irrelevant to an individual enterprise's productivity. While the government admitted differences between losses due to "policy" (such as fixed prices, investment in unindustrialized regions, etc.) and losses due to "mismanagement," there is no indication that a distinction was made for the purpose of assessing material rewards.

Reforms allowing increased autonomy in local planning, combined with the linking of an enterprise's managerial autonomy to its level of profitability, meant that by 1979 incentive systems were in place at all levels of local industrial enterprises. Superior production and economic efficiency earned enterprises, their individual managers, and their collective work teams, both additional money and a greater hand in deciding its use.

The expansion in 1979 of the role of light industry, which produces primarily consumer goods, was cast not only in the light of the need to increase exports, but also in general to help fulfill the goal of increasing the living standards of the masses. Thus, the individual, as well as collectives, might receive both material reward for high performance and (through the enhanced availability of consumer goods) additional diversity

of choice in its allocation.

The continual 1977-1979 introduction of wage increases, bonuses, increased availability of consumer goods, and increases in state support prices for commodities introduced inflation as a new economic danger. Nonexistent through much of the history of the PRC, inflation was officially conceded at nearly 6% in 1979, with outside estimates higher. By late 1979, "arbitrary price rises" were an often-mentioned item of concern in broadcasts.⁴⁴ Both Chinese and Western economists in 1979 called for price reforms and liberalization, to allow the prices of raw materials and industrial products to reflect more accurately their market value. However, the Chinese government has been hesitant and apparently unable to agree upon ways of tackling such a complex and controversial issue.

IV. VARIATIONS ON A THEME

Thus far, Chinese industrial reforms have been presented mostly as a matter of national policy decisions, controlled and implemented uniformly across the country. The conception thus is of industrial China as a single, monolithic entity, with coordinated and centralized planning, production, and policy instituted universally and without variation. Yet, in a country as geographically vast, economically varied, and politically turbulent as China, some degrees of variation seem to be unavoidable.

Evidence of such variation, however, is scattered and incomplete. Media at the provincial and local levels (the main source available for analysis of sub-national policy) are subject to national as well as local control even in degrees of emphasis placed upon subject material (e.g., the same standard sets of adjectives are invariably employed in local broadcasts describing one or another national directive or theoretical article). Politically, officials are also pressured to follow national leads and campaigns, and therefore provincial policies may instead be similar, and reported as such, without any coordinated propaganda efforts. Finally, the natural governmental aversion to reporting negative news renders coverage of any subject potentially incomplete. (E.g., record production levels in a given industry are always highlighted, but production drops are not mentioned - unless it serves a greater political purpose, such as denigration of the Gang of Four or promotion of a new policy.) The translation of broadcasts and articles into the English language format of FBIS, the major source for this study, offers an additional hazard; with material tightly controlled by propaganda departments, the nuances of single words or phrases may signal either differing political views or priorities, or the same Chinese phrase interpreted differently by different translators.

With these caveats and the handicap of incomplete evidence, an examination of daily Chinese FBIS compilations over the period 1977-1979 does reveal some major variations in the timing and

priority given national reforms; the nature and priorities of reforms and experiments carried out under the direction of local officials; and the manner in which new reforms and policies were presented to the general population. These differences can generally be categorized in one of three ways: as due to 1) regional, geographic, or demographic factors; 2) economic factors (the differing nature of local economies), or 3) political factors, including the use of local or provincial experiments as tests for the possible future implementation of national measures.

The first of these factors is the one which has been most stable, both before and during the period under examination. Calls for production of non-essential items have consistently demanded that priority be given to the supply of additional industrial and consumer goods to rural areas, and non-staple food items to urban areas, as an attempt to counteract the natural bias in their distribution. The types of consumer goods made available also vary regionally with differences in climates and cultures. In particular, the Chinese government makes a special effort to publicize the amount and variety of goods made available to minority (non-Han) peoples.

The special attention given to minorities is also reflected in the anomalous policies of the autonomous regions, where the greatest concentrations of minorities are located. Particularly in Nei Monggol (Inner Mongolia) and Xizang (Tibet), which along with Xinjiang have the strongest cultural ties with groups

beyond the boundaries of the PRC, propaganda efforts continuously return to the theme of vast improvement in the masses' living standards since liberation, the spread of prosperity, and the free availability of goods. The call for increased consumer goods and attention to the "livelihood of the masses" - a propaganda theme immediately preceding the reinstitution of material incentives elsewhere in the country - was voiced first during the period 1977-1979 in the minority areas, particularly Nei Monggol, but for reasons perhaps only peripheral to the reforms under consideration elsewhere. More important in these areas was the ongoing struggle to ensure loyalty to the Chinese motherland, particularly along the long and antagonistic Soviet and Mongolian borders, by buying off the residents.⁴⁵

Geographic proximity to the capitalist Hong Kong and Macao colonies, and strong family ties to large numbers of overseas Chinese, were important factors in Guangdong Province's early and unusually intense efforts in implementing material incentive programmes. Later, the 1979 establishment of Special Economic Zones in Guangdong and Fujian was designed to help lure the investment capital and technical expertise of Chinese expatriates back to the sections of their native country where they were most likely to have existing family and emotional attachments.⁴⁶

The physical remoteness and underdevelopment of China's hinterlands, particularly the western autonomous regions (Xizang, Xinjiang, and Qinghai), also affected the nature and pace of reforms there. Instantaneous communications notwithstanding,

the political movements and campaigns of the rest of the country often took months to filter westward, and raged on while they were superseded by new movements elsewhere. (An excellent example of this was the January 1978 ouster of Saifudin as Party first secretary in Xinjiang; he was the last of a series of provincial heads removed in late 1976 and 1977 under accusations of direct or unwitting collusion with the Gang of Four.) More generally, longstanding Chinese efforts to industrialize the most backward of the country's regions had led to a continuance of subsidies for uneconomic enterprises that, under the 1978-1979 drive for financial accountability among enterprises, would not have been tolerated elsewhere. Conversely, the relatively more industrialized coastal areas were often prime sites for new reforms and experiments because of their pre-existing facilities and advanced development.

Differing economies in different provinces and regions also affected the implementation of reforms. Since reforms across different economic sectors were not uniform, provinces and regions whose economies were dependent upon one sector or a small number of industries or crops varied accordingly. Within sectors, varying conditions also led to differences. In agriculture, for instance, nearly continuous growing seasons, efforts to popularize triple-cropping, and predominance of labour-intensive crops such as rice led Guangdong to become a trend-setting in its attention to more efficient policies in the utilization of manpower; such policy has a relatively high impact there upon the

general goal of increased labour productivity.

In industry, the substantial investment in previously unindustrialized areas was undertaken with political and social as well as production benefits in mind. Reforms intending to emphasize efficient, coordinated production and management - with punishment for noncompliant enterprises - were more difficult to implement in areas whose inexperience in industrial management, scale of operation compared to the available market, and access to raw materials were all recognized as deficiencies when the enterprises began. These enterprises, presumably, are also included among industries whose losses are categorized as due to policy rather than mismanagement; judgement of their performance strictly by standards of profitability would place such enterprises at a considerable disadvantage.

Conversely, areas heavily involved in light industrial output, such as Shanghai and Guangdong, found themselves under greater relative pressure to increase production (and productivity) at all costs, in order to generate additional export goods and foreign income. They, too, were placed at a disadvantage by state policy, as exports are sold at lower prices and are less profitable than items produced for domestic use. At the same time that such areas were expected to set examples in their use of material incentives to spur production, they were relatively disadvantaged in the measurement of their output through profitability and the corresponding unavailability of incentive funds.

Specific information on the relative nature of provincial

and local economies is difficult to obtain;⁴⁷ this, along with space limitations, allows only generalizations here. However, the factor of divergent local economies is an important one to consider as a potential explanation for divergent or experimental local reforms, or other variations in reported or actual local industrial management policy.

The third type of deviation from national policy, roughly categorized as being "political" in nature, is both the most interesting and the most difficult to trace. The period of 1977-1979 saw a greater amount of freedom granted to provinces (and to local enterprises; beyond ones publicized more widely, however, information on these is beyond the scope of this study) to embark upon experiments of their own in boosting industrial productivity. By 1979, provincial experiments were openly encouraged by the central government, many of a similar nature involving increased enterprise self-management. Thus, while the content of these local experiments might have been spontaneous, the decision to embark upon experiments was a manifestation of national policy. Reform efforts also began at a time when the new leadership had not yet fully consolidated its power. Thus, the differing natures of experiments and reforms at a provincial level could also be indicative of factional political struggles among provincial (and national) leaders. The leaders of some provinces (such as Sichuan) were well ahead of national reform efforts with their own measures; in other provinces (such as Anhui) new national policies and emphases were markedly slow

in filtering down and replacing the old.⁴⁸ The focus in the remainder of this section will be upon deviations which have been ahead of (rather than behind) the national norm, and have or might in the future serve as models with which new national measures might be justified.

The most significant deviations in industrial management policy during 1977 occurred in Sichuan. They were notable both for the precedents set for national policy, and for the patronage of then-provincial Party first secretary Zhao Ziyang. Three years later, Zhao would rise to replace Hua Guofeng as China's Premier - partially upon the success and notoriety of his Sichuan leadership, which served as a legitimation of Dengist policies and politics.

FBIS entries from Sichuan reveal frustratingly little about actual industrial management measures employed there, especially in 1977. However, as early as March 1977, the topics and demands of provincial broadcasts contain some remarkable material, extraordinary for its time but commonplace the following year. Various entries during the summer of 1977 include calls for: elimination of wasteful meetings and better work assessment, with rewards for high quality; implementation of sound rules and regulations "with the system of post responsibility as the main factor," tightened labour discipline, and strengthened enterprise management; and an assertion that "the leadership...must take good care of the masses' livelihood...insuring that the income of the great majority of peasants increases on the basis

of greater production." Sichuan was also the first site in China to introduce the "to each according to his work" campaign as a prelude to renewed emphasis upon material incentives.⁴⁹

Within this series of broadcasts lie justifications for material incentives, and for the abolition of plants' Revolutionary Committees and three-in-one management teams, to be replaced by a system of individual managerial responsibility. These were two of the major national policy changes of the following year, 1978. The details of whatever early reforms were actually implemented in Sichuan were not mentioned, but their results were notable. A province characterized by the Chinese media as previously in political and economic turmoil, Sichuan recorded tremendous agricultural and industrial gains in 1977. However, these were officially ascribed to eradication of the influence of the Gang of Four, with no mention of any specific reforms or their effects.⁵⁰

Further reforms followed; in the fall of 1977 Zhao issued a circular to improve the province's distribution "to insure peasants' incomes increase." With regard to industry, Zhao undertook two measures later employed as national models. The first was the expansion in several experimental enterprises of managerial autonomy in determining production and marketing, retain a greater share of their own profit, retain greater control over how the profit retained by the collective would be distributed, and negotiate purchases directly with foreign trading-companies. While a number of problems were encountered, such as

bureaucratic quarrels between enterprises and state planners over the exact amount of control that enterprises would have over funds and the method of determining the profit involved, production and profitability were significantly higher in the trial enterprises than in the province at large. The experiment was expanded to 100 enterprises in the following year.⁵¹ Sichuan also moved to promote "economic integration," the combination of a number of smaller enterprises into larger jointly managed ones. This was done both among industrial enterprises and, by merging state farms with industrial and commercial units, in combination with agriculture and commerce.⁵² By late 1979, the resulting success had led to the popularization of both experiments as national models.

Sichuan continued to forge ahead. 1979 FBIS entries included a discussion of integration of planned and market economies and further experiments in the area of enterprise autonomy. These experiments included giving more freedom to individual enterprises to control their material acquisitions; limited autonomy for enterprises to produce goods in addition to those specified in state plans; allowing these enterprises a fixed percentage of foreign exchange from materials sold abroad; and, correspondingly, greater autonomy in the direct purchase of foreign materials and equipment. The experiments in larger, jointly managed enterprises were also expanded. Broadcasts called for managed competition between industrial and commercial concerns by allowing factories to market their products directly, and for reform of

fixed price policies affecting the profitability of specific industries.⁵²

Other provinces, while not nearly as notable in their actions as Sichuan, were also noticeable in 1977 for being slightly ahead of the national directives. Gansu, Shandong, Jilin, and Guangdong were all advanced in some reform areas, though none consistently so. A June 1977 Gansu broadcast referred to the use of work point systems, productivity measures, and evaluation of labour long before it was fashionable; Gansu was later one of the earliest provinces to begin emphasizing enterprise profitability. Shandong, after being noticeably quick to abandon "correct ideology" as a determining factor in managerial policy, was by 1978 used as a national model for its reorganization of its farm machinery industry; a national reorganization of the farm machinery industry, with similar objectives, followed later in the year.⁵³

Jilin's Party first secretary, Wang Enmao, called in spring 1977 for an increase in light industrial goods, to meet demands and improve people's livelihoods, as well as the launching of a mass movement for technical innovations in industry. Jilin was also among a handful of provinces that emerged late in 1978 with early, though less publicized, imitations of Sichuan's enterprise autonomy experiments. Experimental expansion of self-management rights in thirty Jilin plants met with some, though not unusual, success. Anhui, Zhejiang, Hunan, and Beijing also launched early self-management autonomy experiments, with more notable results.

Retention of 23% and 17% of enterprise-generated profits in Hunan and Beijing respectively led to significant production increases in both cases.⁵⁴

Jilin appeared again in 1979 as the first province to promote publicly the closure of unproductive factories. Without (as usual) detailing logistics involved, the province issued directives to:

- 1) suspend production in wasteful or sub-standard enterprises;
- 2) force enterprises "whose products do not sell" to suspend production or switch to alternative products; and
- 3) close down factories operating consistently at a loss.⁵⁵

By late 1977, Guangdong was distinguishing itself as a consistent second site of important provincial variations. December 1977 broadcasts included a call to produce greater amounts of light industrial products for export, and encouragement of family sideline occupations with appropriate financial support for them. Through 1978 and 1979, Guangdong developed into a pacesetter in the use of material incentives to industrial workers; the first half of 1978 witnessed a flood of reports of assorted virtuous enterprises employing different variations of material reward systems to boost production and quality, improve worker safety, decrease absenteeism, and boost the incomes of workers. Measures to counter the excessive requisitioning of manpower from enterprises, a carryover from provincial agricultural reforms, appeared first in Guangdong at this time and later received national prominence. In 1979, the province also instituted Sichuan-style experimental autonomy for designated enterprises,

again with favourable results.⁵⁶

The proximity of Guangdong to Hong Kong and Macao, and the Guangdong origins of large numbers of overseas Chinese (being actively courted by the PRC government), undoubtedly contributed to Guangdong's early reemphasis of both material incentives and foreign trade policies. The concentration of Guangdong officials upon the export of goods and import of foreign capital actually held back organizational reform among Chinese enterprises in the province, as the provincial leadership concentrated its energies in other areas.

Calls to boost light industrial production for export appeared in Guangdong as early as 1977. Starting in 1978 there were reports that direct investment would be allowed from Hong Kong. A February Hong Kong Standard report was the first suggestion of a national policy of drawing overseas Chinese back to China, with the site and labour provided for investors wishing to manufacture and export goods (thus earning the PRC needed foreign exchange).⁵⁷ Guangdong, in turn, was reported to be demanding that "some of its foreign currency remittances should be turned over to local authorities for the import of sheet steel to speed modernization."⁵⁸ A later report estimated that "HK\$100 million was expected to be ploughed into factories and boatyards just beyond the (Hong Kong) border" in Guangdong.⁵⁹ By March 1979, the courtship of foreign investment resulted in the creation of two Guangdong "Special Economic Zones." One more zone in Guangdong and three in neighbouring Fujian were added later in 1979.⁶⁰

Guangdong, along with the provinces of Fujian and Hunan, added another twist in mid-1979 to the increasing freedom of local authorities to deal directly with foreign businessmen. Guangdong officials offered to "provide crude oil, in multi-million-barrel quantities, as a possible means of payment for future heavy machinery and equipment imports," circumventing traditional foreign currency shortages. All three provinces had reportedly been given "authority to negotiate non-ferrous resource transactions directly with foreign firms."⁶¹ This, in turn, held implications for possible future joint development of suspected offshore oil deposits, particularly in Guangdong's Pearl River Basin.

The third area where, in 1977-1979, important deviations from national policy have repeatedly occurred, is China's large cities - particularly Shanghai and Beijing, but also Tianjin. Shanghai, as a center of pre-liberation industry in China, has consistently had an unusually high labour productivity and industrial performance compared to the remainder of the country. This can be attributed in part to smaller than average units, less vertical integration and greater centralization in planning, less excessive stockpiling (particularly with the geographic proximity of any raw materials or markets needed - a factor that also keeps production costs abnormally low), and a relative advantage in technology. Shanghai also has a much higher ratio of light to heavy industrial facilities than the national average, which in turn leads to higher productivity and profitability

(heavy industry having a greater investment in capital equipment, and fewer direct sales).⁶²

The reforms undertaken within much of Chinese industry during 1977-1979, then, were in the nature of characteristics already existing in Shanghai (and, to a lesser extent, other coastal cities). For instance, the initial 1978 organizational reforms of the machine-building industry were specifically targeted towards operations in Shanghai, Beijing, Tianjin, and the north-eastern industrial province of Liaoning, where many of the largest operations were located and reorganization was judged easiest.⁶³

Beijing and Shanghai factories were both subjects for much experimentation in 1978-1979. A 1978 Beijing Review article details an experimental bonus system in a Beijing factory, and notes that "for a year now, a number of factories in Beijing have been trying ways of integrating moral encouragement with material reward..."⁶⁴ The indication that more than one experiment was under way simultaneously is a reminder that, at the time, enterprises in Beijing were being given a relatively high degree of autonomy in determining possible plans for stimulating and rewarding workers, as one of the earliest locations of further self-management experiments patterned after those of Sichuan. Small-scale shops in Beijing were "brought under the direct control of the city's industrial bureau to facilitate... coordination," in another experiment reminiscent of previous reforms in coordinated industrial and commercial ventures in Sichuan.⁶⁵

Reports also surfaced of trial bonus systems similar to those of Beijing and Sichuan-style combined, larger enterprises among Shanghai factories, and of the establishment in Shanghai of an informal "small loan programme" to assist small enterprises.⁶⁶ Shanghai, in particular, urged an even more flexible and open-minded attitude toward reforms than did the national government, with repeated broadcast calls to "let what is reasonable become legal."⁶⁷ Shanghai was also the site of the first 1979 experiments in implementing intra-factory contract systems between different departments supplying each other with raw materials or semi-finished products.

V. CONCLUSION

The new policies and reforms of the Chinese leadership in the period 1977-1979 had positive effects, with industrial production up steadily during the period. Nevertheless, substantial problems and challenges remained in finding an effective industrial development policy and ironing out the problems in managerial reforms being considered or already adopted.

At the end of 1979, weak infrastructural capacity was still being identified as a constraint upon further industrial growth; in some instances, conditions were worse than they had been three years before. By 1979, many plants in Guangdong and Fujian were operating only four days a week due to power shortages, and some plants were forced to suspend production entirely. 1979

FBIS entries were still repeatedly calling for more steel, more electric power, more fuel, and more raw material production, and characterizing their poor production as weak links in the nation's economy.⁶⁸ The rapid retraction of capital construction projects needed to expand infrastructural capacities after issuance of the 1976-1985 Ten Year Plan suggests that these problems could remain for some time. As well as internal industrial growth, such problems could also affect the government's efforts to attract foreign investment (e.g., complaints about poor transportation and other infrastructural facilities in Special Economic Zones).

Shortages of trained workers and technical operators also needed to be addressed. Much of Chinese industry was (and is) not automated; the incorporation of new technology poses serious manning and training problems in managerial policy. On one side, lack of such a group of skilled workers impairs Chinese ability to assimilate new technology; on the other, the creation of a new, probably young, advanced group of skilled workers presents managerial problems in handling senior, but less proficient, workers, particularly workers and cadres now disadvantaged by their lack of education during the Cultural Revolution and unable to advance further under the accustomed criteria.

Another future managerial need at the end of the 1977-1979 period was the stabilization of material incentive policies. Throughout the latter two years, incentives continued to increase, with no signs of leveling off. Government broadcasts repeatedly referred to popular opinions that the incentives, as of late

1979, were not sufficient to stimulate productivity in the manner hoped for, and that there was impatience at the cautious nature of reforms and at experiments which, though presented as successful, still remained experiments rather than broadly implemented new directives.⁶⁹

The reforms and experiments of 1977-1979 described here provide a base from which further experiments, reforms, and models for emulation might proceed. The organizational policies adopted were anticipated to take a long time to implement uniformly across Chinese industry. Reorganization of the agricultural machinery industry, for instance, was expected to require two to three years for full implementation in the most advanced areas,⁷⁰ and presumably much longer in the less developed provinces. The implementation of material incentive reforms, too, was faced with various problems and delays, even as experimental enterprises pressed forth with further innovations and greater individual opportunities in their incentive policies.

However, the experiences gained by these early reform efforts might not have been fully applicable across all of Chinese industry. The government's rationale for a slow, gradual process of experimentation has been a desire to avoid the debacles of past reform efforts (such as the Great Leap Forward) by learning the repercussions of and tuning the mechanisms of reforms before broadly implementing them. For initial experiments, though, generally already very advanced enterprises have been chosen for participation. This leaves unanswered not only the question of the

appropriateness of a given measure once implemented universally, but also whether the generally favourable results of experiments are due less to the nature of the new policy than to the prosperous trial enterprises selected.

The nature of promulgated reforms has been generated by political as well as economic realities. The slow process of policy evolution has continued in response both to experimental results and to the lack of consensus among and changing nature of the leadership itself. The July 1977 restoration of Deng Xiaoping had a marked effect upon the emphasis upon material incentive policy; Deng's gradual assumption of political control through the period at the expense of Hua Guofeng was also reflected in a growing emphasis upon planning policies and bureaucratic reform. Provincial political considerations also often played a determining role in the nature of reform policies implemented.

Those policies have continued to change in recent years, as have the strengths of the political actors promoting them. Deng Xiaoping has further consolidated his political power, promoting followers into key positions and adopting measures to combat the endless layers of bureaucracy which plague the industrial planning process (along with the rest of Chinese government) and have impeded the progress of reforms. Premier Zhao's work report to the fourth session of the fifth National People's Congress, in December 1981, continued to address industrial management problems of excessive stockpiling and specialization, with calls to "continue the all-round consolidation and necessary restructuring

of enterprises by groups" and enforcement of a "system of economic responsibility" penalizing wasteful or unprofitable plants. Further steps had been taken to provide planning flexibility for local enterprises. Noticeably absent were references to incentive policies.⁷¹ The fact that, after five years of trial, many experimental reforms are still experimental in nature, indicates a continuing indecision and variability among Chinese leaders as to future developmental strategies.

Notably, the use of a measure of local latitude in experimentation in itself gained acceptance in 1977-1979 as a method of generating and popularizing innovations. While, in 1977, Sichuan and other provinces whose policies showed deviations from the national standards were cautiously vague about their descriptions, by 1979 provincial experiments were being much more openly reported, usually along with caveats that these new innovations were, after all, only experiments, and would remain so until their imperfections were solved. The next logical step in this gradual expansion of local autonomy would be the open reportage of actual policy which differed from that at the centre; however, no indications of this were noticed through the close of 1979.

Certainly, imperfections do, indeed, exist in the reforms and innovations promulgated through 1979. Three major categories of them are identifiable:

- 1) At least two constituencies exist which make implementation of efficient, production-oriented reforms potentially more

difficult. The first of these is the large number of workers and cadres educated and brought into the labour system under the Cultural Revolution. These workers, having been raised with an ideology many of whose tenets are now contradicted and scorned by Chinese leadership, find themselves disadvantaged by the new criteria for promotion, group leadership, and even pay scales, and threatened in their ability to keep positions already attained. Communist Party membership more than doubled during the ten years of the Cultural Revolution, and it is unlikely that all of these workers have become enthusiastic converts to the policies of the new leadership. At the least, they pose a political limit to the speed with which reforms can be pursued.

The second group that poses obstacles to reform implementation is bureaucracy, both that of the state and that of individual enterprises. Any organization, particularly a very large one like the Chinese government, has a certain resistance to change. That resistance can only be heightened by the nature of the organizational reforms of 1977-1979, which, in discouraging reliance upon vertical hierarchies and unclear or overlapping administrative jurisdictions, encouraging local decision-making autonomy, and emphasizing managerial efficiency, pose a direct threat to the power and potential power of the bureaucracy. One of the difficulties experienced in the Sichuan self-management experiments was the conflict between plant managers and state planners over control of the allocation of the plant's share of its accumulated profits, a dilemma for which no solutions were

offered.⁷² Old practices of overlapping and confused authority, while inefficient for managerial purposes, gave "something to everyone" in a way that the new system does not.

2) Another facet of interest in the Sichuan experiments, relevant to many of the other measures employed during the period and yet to be satisfactorily resolved, was the struggle to find acceptable ways to integrate market characteristics with a centralized, planned economy. This manifests itself in a number of ways. Job security and the provision in a socialist society of a place in the work force for all workers has yet to be reconciled with the notion of sanctions such as individual firings and plant closures for poor productivity. Implementation of such sanctions could impair the state's ability to control its job market, and exacerbate problems of urban unemployment.

The entire issue of the policy of fixed prices, and the linking together of profitability with judgements of output when fixed prices may predetermine the results regardless of enterprise profitability, also falls under this heading. The nature of reforms already implemented strongly suggests a revision of price laws in order to reflect market values more closely, if only by more frequent and perhaps automatic readjustment of fixed prices. However, the size of that task, and its effect upon the socialist goal of state support for all citizens, may make such reforms prohibitive.

The desire to include a greater role for market forces in China's planned economy has also been largely responsible for

moves to give local enterprises greater flexibility in their determination of production and marketing policies. This, too, has not been easily reconciled with the goal of increasing state centralization and efficiency in planning.

By 1979, inflation had also become a problem in China, as the government was unable completely to finance its massive expenditures in increased wages, bonuses, and commodity prices. Should the problem escalate, it would negate much of what incentive programmes had hoped to accomplish, in a circular fashion familiar to most capitalist economies.

3) Perhaps the most important characteristic, and potential pitfall for reformists, is the potential irreversible nature of reforms that a continuation of experiments and reforms undertaken in 1977-1979 would engender. While workers raised under an egalitarian system might adapt to a system of material incentives, the reverse process would be more difficult to enforce. Broadcasts which stress that the experiments of the period remain tentative, and are flexible enough to evolve should difficulties arise, overlook the loss of flexibility that the process of experimentation itself leads to.

This irreversibility manifests itself in two separate ways. One is the almost narcotic lure of additional income and additional consumer goods (for individuals) and foreign investment capital (for state planners). A recent report indicates that along with heightened prosperity and additional freedoms in the Special Economic Zone of Shenzhen have come many of the social ills of

Hong Kong, such as prostitution, gambling, and pornography.⁷³

The experience of a number of underdeveloped countries has demonstrated the difficulty of controlling the terms under which foreign countries and corporations invest in local economies. Such investment has often led to widespread poverty and large income disparities among individuals, and compromise of the national economic integrity of host countries. While China is unusually well equipped, in terms of both resources and centralized governmental structure, to impose strict state controls upon the development process, the danger of a loss of such control is still present.

Should the Chinese, at some future point, decide that the increased productivity brought by a given level of incentives is not worth the social costs, or is not desirable in terms of the foreign commitments necessary, they may find the incentive "experiment" to have taken on a life of its own. Similarly, it is difficult to imagine a return to the near-autarky of previous Chinese modernization policies once a certain level of foreign commitments have been entered upon. The balance between autarky and complete interdependence with foreign economies must still be found.

Secondly, the process of experimentation and local autonomy itself may be irreversible. The conscious effort by the new Chinese leadership to depoliticize managerial policy implies that, regardless of whether a development course along current lines or an entirely different model is eventually adopted, it

is most likely to be judged on the basis of efficiency rather than strictly ideology. While the state strives to increase the centralization and coordination of planning, the decrease in direct state control of local policy (through greater local autonomy and control of percentages of state allocations), if carried through on a widespread basis, would also be difficult to regain. Moreover, the state's very depoliticization would make the type of ideological campaigns used to rally support to national causes in the past less practicable.

In triggering the series of reforms and experiments described in this paper, the new Chinese leadership has moved cautiously and was careful to keep as many alternative policy decisions as possible open. However, without having fixed upon a single guiding strategy, by simply invigorating the process of reform, China may have closed off more options than it would like.

FOOTNOTES

- 1 This was a specific directive promulgated by Chairman Hua Guofeng at the December 1976 national Learning from Dazhai conference, and in January 1977 was being busily propagated throughout the lower levels by provincial and local officials.
- 2 "Foreign Broadcast Information Service, People's Republic of China, Daily Report (hereafter referred to as FBIS), Feb. 1, 1977, p. E10; FBIS, April 20, 1977, pp. E1-5.
- 3 Cheng, "The Modernization of Chinese Industry," pp. 26-28; Smil, "China's Energy Technology," pp. 209-212.
- 4 Cheng, op. cit., p. 22.
- 5 FBIS, Mar. 27, 1979, pp. L8-14; FBIS, June 1, 1979, pp. L5-14; FBIS, June 22, 1979, p. L7.
- 6 While the movement was still officially in place, Daqing meetings and conferences were quietly discouraged in 1979. FBIS, Feb. 2, 1979, p. E30; FBIS, June 1, 1979, p. 02.
- 7 China Trade Report, Vol. XV (Nov. 1977), p. 6 reports of one factory in Xian which had reduced compulsory political study to 1½ hours per week, focusing only upon current major political directives. See also FBIS, Feb. 27, 1979, p. L1. One letter to the People's Daily newspaper from a basic-level secretary complained of spending 99 of the first 130 days of 1977 in meetings. FBIS, May 26, 1977, p. E20-21.
- 8 Fingar, "Recent Policy Trends in Industrial Science and Technology," p. 73.
- 9 FBIS, Jan. 9, 1978, pp. E1-10. See also FBIS, Jan. 25, 1978, p. E12-13. A January 1978 Red Flag article, in addition to touting the "principle of specialized cooperation," also issued a call to "use price laws to serve socialism" (by letting market demands help determine supply prices) - another anomalous suggestion for reform that didn't receive full attention for another two years. (A call in the same article to punish nonprofitable enterprises was also notable.) Red Flag No. 1, Jan. 1978; FBIS, Jan. 20, 1978, pp. E11-14.
- 10 FBIS, Jan. 31, 1978, pp. E15-23 contains the full list of proposed measures.
- 11 FBIS, Aug. 28, 1978, p. E9.

- 12 Cheng, op. cit., pp. 29-32.
- 13 Andors, "The Political and Organizational Implications of China's New Economic Policies," p. 48.
- 14 FBIS, Oct. 11, 1978, pp. E1-22 provides a good example; see also FBIS, Jan. 24, 1979, p. E13-14; FBIS, June 2, 1977, pp. E13-16.
- 15 Fingar, op. cit., p. 73-74; FBIS, May 24, 1978, p. E1-2.
- 16 Andors, op. cit., p. 51; FBIS, Oct. 11, 1978, p. E13-14.
- 17 FBIS, Aug. 4, 1978, pp. E13-15.
- 18 Rawski, "Strengths, Weaknesses, and Challenges for Policy in China's Industry Today," p. 59-60.
- 19 Prybyla, "Changes in the Chinese Economy," p. 424-425; Cheng, op. cit., p. 35; Andors, op. cit., p. 52; Fletcher, "Industrial Relations in China," p. 85.
- 20 FBIS, Feb. 23, 1979, pp. E5-8; FBIS, Mar. 11, 1979, p. E10-11.
- 21 Dong, "Instituting an Intrafactory Economic Contract System is a Good Device to Strengthen Business Management," contains a good description of this.
- 22 FBIS, Apr. 22, 1980, p. P3; bureaucratic resistance is also discussed in Suttmeier, "Politics, Modernization, and Science in China," pp. 26-28.
- 23 Shirk, "Recent Chinese Labour Policies," p. 576-577.
- 24 Rawski, op. cit., p. 38.
- 25 c.f. FBIS, Nov. 13, 1979, p. 02; FBIS, Dec. 12, 1979, p. Q1-2; FBIS, Feb. 26, 1979, p. L14; also Fingar, op. cit., p. 75.
- 26 FBIS, Sept. 21, 1977, p. E7; FBIS, Oct. 14, 1977, p. E9-10; first direct mention by the Chinese government appears in FBIS, Nov. 10, 1977, p. E5-6. See also Cheng, op. cit., p. 32; Prybyla, op. cit., p. 426.
- 27 Guangming Daily, Aug. 15, 1977, in FBIS, Aug. 26, 1977, p. E4-5; Guangming Daily, Nov. 21, 1977, in FBIS, Dec. 2, 1977, pp. E13-18.
- 28 Guangming Daily, Nov. 21, 1977, in FBIS, Dec. 2, 1977, pp. E13-18.

- 29 FBIS, May 21, 1979, p. L7-9; Fingar, op. cit., p. 78; Schultz, "The Four Modernizations Reconsidered," p. 277; Shirk, op. cit., pp. 576-582, describes problems in implementing this line, similar to the problems incurred in determining the recipients of bonuses.
- 30 FBIS, Nov. 22, 1978, p. E27-28; Prybyla, "Key Issues in the Chinese Economy," p. 936; also Cheng, op. cit., p. 39; also Shirk, op. cit., pp. 585-587.
- 31 Shirk, op. cit., p. 586.
- 32 FBIS, May 8, 1978, p. L4; also FBIS, Oct. 11, 1978, pp. E1-22; also FBIS, July 26, 1978, p. E10-11.
- 33 Cheng, op. cit., p. 35-36.
- 34 Red Flag no. 1, Jan. 1978; FBIS, Jan. 20, 1978, pp. E11-14.
- 35 Shirk, op. cit., pp. 576-577, 592-593.
- 36 Christian Science Monitor, Jan. 27, 1982, p. 8, contains a good report on these pressures. Prybyla, "Key Issues...", op. cit., p. 936, and quotes (p. 941) a Hua-issued figure of 7.4% urban unemployment in 1979, mostly among educated youth. Also see Whyte, "Inequality and Stratification in China," p. 686-687; also Nolan & White, "Distribution and Development in China," p. 4-5.
- 37 Red Flag, no. 8, Aug. 1977, in FBIS, Aug. 31, 1977, pp. E1-3; Cheng, op. cit., p. 35. A February 1978 Qinghai rally dated the beginning of the campaign as in July 1977. FBIS, Mar. 8, 1978, p. M2-3.
- 38 A list of the criteria, with explanations, appears in FBIS, Aug. 8, 1978, p. E4-5.
- 39 China Trade Report, Vol. XVII, Aug. (1979), p. 5; Sept. 1979, p. 10.
- 40 Cheng, op. cit., p. 37.
- 41 Dong, "Some Problems Concerning the Chinese Economy," p. 730.
- 42 *ibid*, p. 729.
- 43 Fingar, op. cit., p. 87-88.
- 44 e.g., FBIS, Dec. 21, 1979, p. P2-3. See also Prybyla, "Key Issues...", op. cit., p. 940.

- 45 An excellent example appear in FBIS, Jan. 28, 1977, pp. K2-16, in which the work report of an Inner Mongolian Dazhai conference, in addition to citing gains made since liberation in living standards, emphasizes rural commune and sideline enterprises as ways to further improve the masses' livelihoods. The mass relocation of ethnic Hans to the border areas, especially in Nei Monggol, Xizang, and Xinjiang, was also used to "Sinify" them.
- 46 For additional information on the Special Economic Zones, see U.S. Dept. of Commerce, Doing Business With China, p. 19; China Trade Report, Vol. XVII (Dec. 1979), pp. 7-10.
- 47 Field, et al, Provincial Industrial Output in the People's Republic of China 1949-1975, provides a useful source of provincial industrial information through 1975. While FBIS reports provincial outputs, it does so in a very unsystematic (and doubtless incomplete) way. The Chinese government's stated policy after mid-1979 of making economic statistics more readily available than before will hopefully help alleviate this problem in the future.
- 48 e.g., FBIS, May 12, 1977, p. G1. The Anhui provincial Party first secretary was replaced and denounced as a follower of the Gang of Four the following July. FBIS, Mar. 22, 1977, p. J1, in a piece on rural enterprises, Sichuan Daily calls for, among other things, fighting the idea that "agriculture is a losing business," and to "decide in a rational way on items for and speed of development, make a success of management, insure smooth flow between production and consumption."
- 49 FBIS, Mar. 22, 1977, p. J1; FBIS, May 4, 1977, pp. J1-4; FBIS, June 30, 1977, p. J3-4; FBIS, Aug. 12, 1977, p. J1-2; FBIS, Sept. 16, 1977, p. J1.
- 50 FBIS, Jan. 3, 1978, p. J5-6.
- 51 "A Portrait of Chao Tzu-Yang," Issues and Studies, Oct. 1980, p. 2; also Rawski, op. cit., pp. 160-164; FBIS, July 31, 1979, pp. Q2-4.
- 52 "A Portrait...", op. cit., p. 2; Also FBIS, Mar. 12, 1979, p. J2-3; FBIS, Mar. 13, 1979, p. J2.
- 53 FBIS, June 22, 1977, p. M3-4; FBIS, Sept. 8, 1977, pp. M1-4; FBIS, Feb. 4, 1977, pp. G7-22; FBIS, Jan. 9, 1978, pp. E1-10; FBIS, Jan. 25, 1978, p. E12-13.
- 54 Lin Zili, "Initial Reforms in China's Economic Structure: The Experiments in Giving Autonomy to Enterprises in Sichuan, Anhui, and Zhejiang Provinces," in Social Sciences in China, vol. 1, no. 3, (Sept. 1980) pp. 172-194, contains a good official description

of the reforms. See also Rawski, op. cit., p. 159-160; FBIS, Mar. 31, 1977, pp. L8-14; FBIS, Apr. 4, 1977, pp. L4-9; FBIS, Apr. 15, 1977, pp. L7-9; and FBIS, July 12, 1977, pp. L3-16.

- 55 FBIS, Mar. 19, 1979, p. 83.
- 56 As a start, FBIS, Dec. 2, 1977, pp. H5-8; FBIS, Dec. 28, 1977, pp. H1-12; FBIS, Feb. 15, 1978, p. H5-6; FBIS, Mar. 6, 1978, p. H1-2; FBIS, Mar. 15, 1978, p. H8-9; FBIS, Mar. 21, 1978, p. H4-5; FBIS, Mar. 22, 1978, p. H4-5; FBIS, Feb. 7, 1978, p. E16; FBIS, Dec. 21, 1979, p. P2-3.
- 57 FBIS, Feb. 7, 1978, p. E16.
- 58 China Trade Report, vol. XVI (May 1978), p. 5. Unusual activity in the border town of Shenzhen was also noted, yielding rumours that the semi-annual Canton export trade fair would move there.
- 59 China Trade Report, vol. XVII (May 1979), p. 12.
- 60 Later, in May 1979, the Chinese government announced laws to allow foreign investment in joint ventures throughout China. See also U.S. Dept. of Commerce, Doing Business With China, p. 19.
- 61 China Trade Report, vol. XVII (Dec. 1979), pp. 7-10.
- 62 Rawski, op. cit., pp. 235-243.
- 63 FBIS, Sept. 22, 1978, pp. E3-5.
- 64 Beijing Review, No. 34 (Aug. 25, 1978), p. 23.
- 65 Falkenheim, "Administrative Reform and Modernization in Post-Mao China," p. 15-16.
- 66 Rawski, op. cit., p. 240.
- 67 c.f. FBIS, Nov. 13, 1978, p. 08-9.
- 68 Cheng, op. cit., p. 39-40; see also FBIS, May 21, 1979, p. L6; FBIS, June 1, 1979, p. L10-11.
- 69 China Trade Report, vol. XVII (Dec. 1979), pp. 7-10; also Cheng, op. cit., p. 39; also Christian Science Monitor, Nov. 25, 1981, p. 2.
- 70 FBIS, Sept. 22, 1978, pp. E3-5.
- 71 Beijing Review, no. 51 (Dec. 21, 1981), pp. 6-36.

- 72 Rawski, op. cit., pp. 160-164; FBIS, Mar. 12, 1979, p. J2-3.
- 73 Vancouver Sun, Apr. 22, 1982, p. B10.

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