Modernization in Mainland China: Self-Reliance and Dependence

Author(s): Chien-Hsun Chen

Source: The American Journal of Economics and Sociology, Jan., 1992, Vol. 51, No. 1 (Jan., 1992), pp. 57-68

Published by: American Journal of Economics and Sociology, Inc.

Stable URL: https://www.jstor.org/stable/3487654

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at https://about.jstor.org/terms



is collaborating with JSTOR to digitize, preserve and extend access to *The American Journal of Economics and Sociology*

Modernization in Mainland China: Self-Reliance and Dependence

By CHIEN-HSUN CHEN*

ABSTRACT. After 1949, mainland China, a developing socialist country, adopted an inward-looking policy with emphasis on self-reliance and economic independence. However, in their drive for *economic reform* that began in 1978, mainland China drifted to the new doctrine of "taking self-reliance as the principal means and external assistance as a subsidiary." A version of the two-gap model is constructed to test the hypothesis that both domestic *capital accumulation* and *foreign capital* inflows affect economic *development* in *mainland China*, the latter being an indicator of modernization. Due to insufficient data, pooled cross-section and time-series data for the period 1984–1986 are employed. The quantitative evidence suggests that foreign capital inflows, instead of domestic capital accumulation, have importantly affected the *modernization* drive of mainland China. The recent *political turmoil* in mainland China has slowed down foreign capital inflows which in turn may retard its modernization.

I

Introduction

THE PROCESS OF MODERNIZATION by LDCs (less developed countries) since the end of the Second World War has been increasingly based on attracting foreign capital to enhance export promotion strategies. Since the Chinese Communist Party (CCP) took over the mainland in 1949, it has attempted to launch a modernization drive within the socialist economy in order to create jobs and to escape from the vicious circle of underdevelopment.

Mao Zedong all along had advocated modernization. In 1957, Mao set forth his four-pronged goal to build mainland China up as a socialist country with modern industry, modern agriculture, and modern science and culture (Mao, 1977, p. 366).

In 1964, in his report on government work to the Third National People's Congress, Zhou Enlai formally proposed to bring about the modernization of industry, agriculture, national defense, science and technology by the end of this century (Zhou, 1984, p. 439). Because of the chaos that accompanied their

^{* [}Chien-Hsun Chen, Ph.D., is research fellow, Chung-Hua Institution for Economic Research, 75 Chang Hsing Street, Taipei, Taiwan, 106.] The author is very grateful to the referees for providing helpful suggestions and comments.

American Journal of Economics and Sociology, Vol. 51, No. 1 (January, 1992). © 1992 American Journal of Economics and Sociology, Inc.

economic development policies, little progress was made in the four modernizations.

The Third Plenary Session of the Eleventh Central Committee of the CCP held in December 1978 marked the beginning of the change from the traditional Stalinist "big push" model toward a socialist modernization process. Deng Xiaoping, the post-Mao leader, has been extremely explicit about his intention of carrying out the four modernizations before the end of this century.

In the modernization drive that began in 1978, mainland China adopted an outward-looking policy to resolve the problem of insufficient amounts of foreign capital and to overcome technological and managerial backwardness.

The central focus of the process of modernization (Moore, 1977) has been economic development although modernization is a complex process also involving political development, social development, and cultural development.

In the process of modernization, ceteris paribus, the economic mechanism of the Harrod-Domar growth model has suggested that the mobilization of domestic savings and inflows of foreign capital are needed to generate investment sufficient enough to accelerate the process of modernization. However, most of the LDCs suffer either from a shortage of capital and/or a shortage of foreign exchange, as represented in the well-known two-gap model (Kindleberger and Herrick, 1977, pp. 296–298).

To make up for such shortages, many LDCs have adopted an outward-looking development policy that encourages free trade and free movement of capital thus utilizing foreign resources in order to pave the way for rapid economic growth. However, foreign capital inflows have often given the impression that the LDCs are economically dependent upon the developed countries.

The literature concerned with the impact of foreign resource inflows into LDCs has taken different kinds of analytical approaches, one of which is the above-mentioned two-gap model which focuses on the relationship between economic development and foreign capital. It is this approach that is considered in this study.

The argument which revolves around the impact of foreign capital inflows on economic development, is a controversial one. On the one hand, Rosenstein-Rodan (1961), and Chenery and Adelman (1966) have supported the view that foreign capital inflows have contributed to the speeding up of the modernization process, since it reduces domestic savings or the foreign exchange gap. On the other hand, Griffin and Enos (1970), Weiskopf (1972), Areskoung (1973), Gualti (1978), and Bhagwati (1985) have argued that foreign capital inflows may lead to an increase in government spending, which in turn may lead to a decrease in domestic savings; hence, this would suggest that foreign capital inflows retard economic development.

Modernization

Empirical studies on the relationship between foreign capital inflows and economic development have been conducted by Papanek (1973), Stoneman (1975), Gupa (1975), and Gupa and Islam (1983, pp. 26–32). Their work is based on an international cross-sectional study of the 1950s, 1960s, and 1970s. Their estimations involve regressing the economic growth rate on the savings rate and on foreign capital inflows. The data on foreign capital inflows are given in aggregate form or are decomposed into foreign aid, direct foreign investment, and other foreign capital inflows.

They concluded that domestic savings and foreign capital both contribute to economic development. However, Gupa (1975) previously concluded that foreign capital is more important than domestic savings in speeding up the process of economic development.

Has mainland China's modernization drive depended on foreign capital inflows? In other words, have foreign capital inflows affected mainland China's economic development? The main purpose of this paper is to analyze the effectiveness of the inflows of foreign capital in mainland China's modernization drive since 1979.

Owing to the fragmentary and incomplete nature of the data, our analysis only covers the period 1979–1988, and the empirical estimation is focused on pooling cross-section and time-series data for the period 1984–1986. We have also decomposed foreign capital inflows into three categories, namely, foreign aid, direct foreign investment, and other foreign capital inflows.

The remainder of this paper is set out as follows. In Section II, mainland China's self-reliance doctrine is discussed. Section III explains how foreign capital is absorbed and utilized in mainland China. A simple regression model explaining the provincial income growth rate is presented in Section IV. The empirical results are laid out in Section V. The final section contains the conclusion.

Self-Reliance and Economic Dependence

MAINLAND CHINA'S economic development policy before 1979 was an inwardlooking one which emphasized self-reliance and independence, and which was aimed at achieving rapid economic growth at the expense of agriculture. Ultimately, self-reliance depends more upon men than machines. Under such a strategy, the optimal mix maximizes the needs of the human body and the needs of the human spirit (Lin, 1975). The self-reliance (ziligengsheng) doctrine can be traced back to the Yenan guerrilla base area (1937–1945), at which time, Mao Zedong stressed economic independence, so that the base area could maximize its output. Self-reliance helped raise productivity initially because resources might be mobilized and organized more efficiently, and the peasants and workers could be motivated to work more intensively.

In the 1950s, mainland China looked upon the Soviet and the Communist bloc countries as the most reliable source of assistance, and, as a result, the lean-to-one-side (yibiandao) policy was instituted. Economic dependence on the Soviet Union was significantly strong. Mainland China received 1.9 billion U.S. dollars worth of Soviet assistance to complete 156 projects in metallurgy, motor vehicles, machine production, coal, petroleum, power, telecommunications, chemicals, and in the national defense industry (Liu *et al.* 1984, p. 2).

However, economic dependence upon the Soviet Union came to an end with the abrupt and total withdrawal of Soviet economic and military aid in 1960 (Wang, 1984, pp. 45–47). The doctrine of self-reliance began to revive, particularly during the Great Leap Forward (1958–1960).

In the early 1960s, mainland China utilized 0.28 billion U.S. dollars of foreign capital to import from Japan and West European countries 84 items for the petroleum, chemical engineering, metallurgy, mining, electronics, and precision machinery sectors (Liu *et al.* 1984, p. 2). However, the campaign for self-reliance reached its peak at the beginning of the Cultural Revolution, and foreign capital inflows were interrupted in the late 1960s. The self-reliance policy widened the technological gap between mainland China and other developed countries, and the initial economic achievements of self-reliance were soon faced with diminishing returns to scale.

To improve technology and productivity, mainland China had to import advanced technology and equipment. During the period 1972–1977, mainland China utilized 3.96 billion U.S. dollars by means of deferred payments (shortterm seller's credit), issued by Japan, West Germany, Great Britain, France, Holland, and the United States to import huge amounts of chemical fertilizer equipment, petrochemical equipment, power generating sets, and data-processing equipment, etc. (Wang and Chen, 1984, p. 682).

In the late 1970s, based on the principle of "taking self-reliance as the principal means and external assistance as a subsidiary" (ziligengsheng wei zhu, waizi wei fu), mainland China drifted away from the hard-line doctrine of self-reliance to an outward-looking policy. The goals of the new doctrine are as follows:

- a) Fill the domestic savings gap;
- b) Bring in advanced technology and managerial skills;
- c) Increase exports and earn more foreign exchange; and
- d) Expand industrial and agricultural productivity (Fan, 1984, pp. 19-26).

In recent years, mainland China has adopted various measures to strengthen economic cooperation with other nations. In May 1980, mainland China decided to establish special economic zones (SEZs) at Shenzhen, Zhuhai and Shantou in Guangdong province, and at Xiamen in Fujian province. Furthermore, foreign enterprises were encouraged to operate in the SEZs through wholly-owned subsidiaries or through joint ventures in construction, tourism, and finance.

From March 2 through April 6, 1984, the State Council hosted a seminar on coastal cities in Beijing, during which a decision was made to open 14 cities to foreign investors. From the north down to the south, these were Dalian, Qinhuangdao, Tianjin, Yantai, Qingdao, Lianyungang, Nantong, Shanghai, Ningbo, Wenzhou, Fuzhou, Guangzhou, Zhanjiang, and Beihai (Guangming Daily, June 11, 1984).

At present, economic and technological development zones (ETDZs) of various sizes are being constructed near these cities and ports. Through ETDZs, mainland China hopes to bring badly-needed advanced technology and foreign capital to the newly opened coastal cities, with the ultimate intention of being able to transfer technical and managerial know-how to the hinterland (Ma, 1985; Oborne, 1986, p. 69).

In the Sixth Five-Year Plan period (1981–1985), total foreign capital inflows reached approximately 15 billion U.S. dollars which was about 7 percent of total fixed asset investment. As regards the uses of the foreign capital, emphasis was put on energy development, basic facilities of railway and harbor construction, social development projects in education, health and other areas as well as in the technological and managerial reformation of a large number of old enterprises (Seng, 1985, p. 22).

According to the proposal for the Seventh Five-Year Plan (1986–1990), total foreign capital of 40 billion U.S. dollars is required to fill the savings gap. Foreign investment should be encouraged in the field of energy development, the building materials industry, the chemical industry, the metallurgical industry, the machine-building industry, the electronics industry, textiles, agriculture, and tourism (Dagong Daily, April 15, 1986).

Ш

Foreign Capital Inflows into Mainland China Since 1979

TAIWAN is regarded by many scholars as a "model of development." Mainland China can take lessons from Taiwan's experiences and adapt them to its own unique circumstances. Taiwan's rapid modernization in the postwar period has been primarily due to the high quality of labor, political stability, efficient policies, and foreign capital. American aid, in particular, played an important role in Taiwan's modernization process in the 1950s (Kuo, 1981; 1983). Mainland China's desire for foreign capital results from its need to carry out modernization programs. Foreign capital inflows into mainland China are reported in Table 1, these being decomposed into three parts, namely, foreign aid, direct foreign investment, and other foreign capital inflows.

According to the Chinese data, foreign aid consists of foreign government loans and loans from international financial institutions. At present, mainland China has loans from Japan, Denmark, Kuwait, Belgium, and Italy for the construction of railway lines, harbors, airports, power plants and stations, building materials, chemical fertilizers, and food processing projects. Loans from international financial institutions are being provided by the International Monetary Fund (IMF), the World Bank, the International Development Association (IDA), and the International Fund for Agricultural Development (IFAD).

Direct foreign investment includes joint ventures, contractual joint ventures, joint exploration, fully foreign-owned enterprises, compensation trade, the processing of materials supplied by clients, the assemblage of parts and components supplied by clients, and leasing.¹ Moreover, the scope of direct foreign investment has been extended from tourism, textiles, and the building industry to cooperation in oil exploration, telecommunications and transportation, machine building, and the electronics industry, etc.²

Other sources of foreign capital inflows include buyers' credit, loans on convertible currency from foreign banks, and the proceeds from the issuance of bonds in international markets.

At first, progress was slow, because of a lack of sufficient information, uncertain

Table 1

FOREIGN CAPITAL INFLOWS INTO MAINLAND CHINA 1979-1987 Unit: US \$ 10,000

Period Fo	oreign Aid	Direct Foreign Investment	Other Fore Capital	ign Total
1979 - 81	185,668 (18.8)	112,069 (10.98)	723,373 (70.48)	1,021,110 (100)
1982	55,634 (22.87)	64,972 (26.70)	122,673	243,234 (100)
1983	78,901 (39.84)	91,596 (46.25)	27,567	(100) 198,064 (100)
1984	90,596 (33.50)	(40.23) 41,885 (52.46)	37,971	270,452 (100)
1985	109,064	195,615	141,534	446,211 (100)
1986	(24.44) 218,322	(43.84) 224,373	(31.72) 283,135	725,830
1987	(30.08) 151,304 (17.90)	(30.91) 264,661 (31.32)	(39.01) 429,191 (50.78)	(100) 845,156 (100)

Note: Percentages are in parentheses.

Sources: Almanac of China's Foreign Relations and Trade 1984, pp. 1097-1100; 1986, pp. 1070-1071; 1987, p. 547; 1988, p.592. approval requirements, an unclear legal structure, and doubt about the continuity of the open-door policy.

As Table 1 shows, the cumulative foreign capital for the period 1979–1981 was about 10 billion U.S. dollars. In 1982, the total amount of foreign capital inflows was 2.4 billion U.S. dollars, that is 1.09 percent of mainland China's national income. However, foreign capital inflows declined in 1983 because of the higher interest payments required for new loans. Since 1984, foreign capital inflows have increased steadily. In 1988, that was 9.84 billion U.S. dollars (*Renmin* Ribao, March 1, 1989).

During the years 1983–1985, the proportions of direct foreign investment in total foreign capital inflows were 46.25 percent, 52.46 percent, and 43.84 percent, respectively. The percentages of direct foreign investment have been increasing since 1985. Between July 1979 and May 1986, there were 6,765 foreign enterprises in mainland China, a breakdown of which is presented in Table 2. Direct foreign investment in real estate topped the list during the six-year period, followed by machinery, electrical products, light industry, and textiles. Foreign investors have tended to be speculative and will not commit themselves to any long-term investment (Grub and Lin, 1988).

Table 3 lists the shares of foreign capital as a proportion of national income available for the years 1982–1987 and the shares of capital accumulation as a proportion of national income available. The shares are quite small.³

IV

The Model

TO ANALYZE the impact of foreign capital on economic development in mainland China, a model based on those of Papanek (1973) and Mosely (1980) and on

Table 2

PERCENTAGE DISTRIBUTION BY FIELDS OF FOREIGN ENTERPRISES IN MAINLAND CHINA 1979-1986

Category	Joint Venture	Cooperative Operation	Wholly-Owned Foreign Capital
Real estate	48.5	- 50	
Machinery,	17.5	2	50
electric products			
Light industry,	20	5	30
textile goods			
Energy	10	20	
Agriculture,		8	
animal husbandry			
Material		10	20
Others	4	5	
Total	100	100	100

Source: Economic Reporter, 1982 (August, 1986), p.26.

This content downloaded from 149.10.125.20 on Sun, 16 Jan 2022 14:46:19 UTC All use subject to https://about.jstor.org/terms

Table 3

CAPITAL ACCUMULATION (CA) AND FOREIGN CAPITAL INFLOWS (FCI) AS PERCENTAGES OF NATIONAL INCOME AVAILABLE (NIA) 1979-1987

Year	CA/NIA	FCI/NIA
1979	34.6	
1980	31.5	
1981	L 28.3	
1982	2 28.8	1.09
1983	3 29.7	.82
1984	4 31.5	1.11
1985	5 35.2	1.80
1986	5 34.8	2.98
1987	7 34.7	3.30
a) 10	nd Trade 1984, pp. 1)71; 1987, p.574; 19	preign Economic Relations 097-1100; 1986, pp.1070- 88, p. 592. of China, 1988, p.60.

the spirit of the two-gap model is established. Pooled cross-section and timeseries data for the period 1984–1986 are employed.

According to the two-gap model, capital accumulation and foreign capital inflows both have an impact on economic development. The form of the estimating equation is, therefore, as follows:

$$YR = f(CAR, FCIR, ET)$$

f₁ > 0, f₂ > 0, f₃ > 0 [1]

where YR is the growth rate of provincial income by region and also an indicator of modernization, CAR is the capital accumulation rate, FCIR is foreign capital inflows as a percentage of provincial income by region, and ET is a policy variable, which represents the degree of openness in mainland China's regional economy expressed by foreign direct investment as a proportion of the provincial income by region.⁴ A greater degree of openness is expected to improve resource allocation and accelerate modernization.

V

Empirical Results

THE DATA in Table 4, containing twenty-seven regions and three sets of timeseries data, is used for empirical testing. Table 5 reports the empirical results of Equation (1). The results in Table 5 seem to fit the Chinese data extremely well as shown by the respective values of \mathbb{R}^2 , SE, and the Durbin-Watson statistic.

The coefficients in Table 5, with the exception of the capital accumulation rate, are as expected. The coefficient of the capital accumulation rate has a negative sign but is statistically insignificant at the 1 percent level. That implies

(in percentages)
1984-86
Economy ,
Regional
to
Related
Statistics

Table 4

	/	- YR	/	/	CAR	/	/	FCIR	/	/	ET	/
	1984	1985	1986	1984	1985	1986	1984	1985	1986	1984	1985	1986
Beijing	16.2	15.0	1.6	39.8	51.1	49.6	1.8	6.7	2.73	4.38	7.05	10.19
Tianjin	11.9	16.0	5.1	35.2	50.2	50.1	2.0	1.2	2.80	3.90	1.28	2.13
Hebei	15.4	13.3	5.2	32.3	34.6	32.5	0.1	0.4	0.17	0.41	0.86	0.50
Shanxi	21.1	8.1	4.1	38.4	43.9	43.2	0.02	0.05	0.09	0.04	0.05	0.01
Inner Mongolia	15.5	14.1	1.5	27.4	31.4	28.2	0.08	0.13	0.26	0.11	0.1	0.07
Liaoning	15.8	12.3	7.9	32.4	33.9	35.4	3.1	17.64	0.46	1.63	4.74	3.01
Jinlin	12.1	7.5	6.1	27.2	30.5	29.5	0.02	0.31	0.56	0.05	0.34	0.04
Heilongjiang	8.5	4.7	8.4	30.9	32.0	34.5	0.05	0.31	0.37	0.19	0.56	1.27
Shanghai	13.2	13.2	3.6	43.6	54.2	54.4	2.9	5.53	2.28	15.88	14.36	10.75
Jiangsu	19.5	16.9	10.2	34.8	38.2	39.9	0.3	0.54	0.24	2.08	2.19	1.32
Zhejiang	23.1	25.3	13.5	35.79	41.2	41.8	0.3	0.48	0.24	1.16	0.84	1.35
Anhui	19.7	16.2	10.3	27.6	30.9	32.6	0.04	0.21	0.59	0.13	0.36	0.58
Fujian	17.8	17.9	5.9	26.03	29.3	31.8	4.3	7.61	3.11	8.71	7.1	4.48
Jiangxi	11.5	14.5	6.2	24.1	26.7	26.4	0.1	0.56	0.22	0.26	0.61	0.33
Shandong	18.7	10.2	7.6	32.2	36.8	36.1	0.6	0.67	0.44	3.87	1.86	1.41
Henan	11.1	12.6	4.9	30.1	32.2	31.0	0.05	0.56	0.10	0.22	1.32	0.44
Hubei	20.5	16.6	4.8	27.1	32.0	30.4	0.4	0.35	0.16	0.36	0.5	0.90
Hunan	9.7	11.5	7.8	21.3	25.9	28.4	0.3	0.25	0.29	1.28	0.48	0.69
Guangdong	15.6	18.7	0.6	29.4	35.4	34.3	8.2	13.36	8.57	51.96	40.94	52.63
Guangxi	4.5	10.4	8.2	19.14	25.8	25.4	0.5	4.1	1.07	0.98	4.21	2.69
Sichuan	14.2	14.1	5.8	25.6	27.6	26.5	0.2	0.33	0.21	1.06	1.04	1.11
Guizhou	13.6	7.7	7.6	22.2	25.1	24.9	0.07	0.27	0.35	0.11	0.18	0.16
Yunnan	13.5	11.5	3.5	31.6	32.0	31.8	0.03	0.37	0.13	0.06	0.33	0.26
Shaanxi	17.1	15.5	6.3	28.3	37.8	37.2	0.03	8.17	1.39	0.06	7.58	2.71
Gansu	13.3	15.1	12.4	28.11	32.7	34.2	0.01	0.12	0.04	0.01	0.08	0.03
Ningxia	15.5	15.4	9.8	31.5	35.8	38.2	0.38	0.37	0.01	0.11	0.05	0.003
Xinjiang	12.9	14.3	9.1	37.6	41.6	38.8	0.10	18.57	0.57	0.12	1.05	0.93
Notes: YR is the growth rate of provincial income by region.	arowth 1	rate of	provinc	ial inc	tome by		. Sources		tiral Vo	Statistical Vearbook of China	re chin	1984
CAR is the capital accumulation rate	capita.	l accum	ulation	rate.			· can inoc		bb. 316-317: 1985.	985. pp.	. pp. 30-31: 1986	-
FCIR is foreign capital inflows	oreign c	apital	inflows	as a pe	percentage	ge of		p. 50; 1987	1987, p	p. 54; 1988, p. 61.	988, p.	61.
provincial income by region.	L INCOME	by reg	10n.		4			Almana	c of Chi	Almanac of China's Foreign Economic	reign Ec	conomic
provincial income by region.	income	by reg	es unen c	as a pe	percentage	de or		Relation;	<i>2115 and</i> 1986, pp	Relations and Trade, 1984, 1100; 1986, pp. 1070-1071;		pp. 1097- 1987,
								p. 549	p. 549; 1988, p. 594	p. 594.		

This content downloaded from 149.10.125.20 on Sun, 16 Jan 2022 14:46:19 UTC All use subject to https://about.jstor.org/terms

Modernization

that the high rate of capital accumulation seems to have had an adverse effect on regional growth for several reasons. First, the higher the rate of capital accumulation, the less the amount of funds that are available for consumption. Low consumption can harm moral and work motivation. Second, the exceedingly high rate of capital accumulation was accompanied by a scale of capital construction far too large for the regional operating capacity to absorb. The coefficient of openness has the correct sign but is statistically indifferent from zero.

The primary focus here is on the effectiveness of foreign resources and domestic accumulations of capital stock on economic development for the 1984– 1986 period. Only foreign capital inflows showed statistically significant result. Thus, foreign capital inflows seemed to have played a relatively more significant role in accelerating economic development in mainland China, than the other two variables employed in this simple model.

VI

Conclusion

THE MAJOR FINDING of the paper is that the estimated model aimed at explaining the variations in the regional income growth rates from 1984 to 1986 does suggest an economic dependence associated with foreign capital inflows in mainland China's modernization drive.

Since June 4, 1989, however, mainland China has been forced to pay economic dues as a result of her government's military suppression of the student-led freedom and democracy movement. The major developed countries decided to suspend official and multilateral agency credit to mainland China. Foreign investors also backed away from making new commitments and foreign exchange income from tourism, donations, overseas remittances and other sources are expected to decline. The recent political turmoil and the leadership struggle in mainland China have caused a shift in policy to the Left and, as a result, economic controls have been tightened.

With the economy suffering intensified retrenchment and recentralization, the extent to which market-oriented policies can be pursued is limited. Coupled

Table 5

REGRESSION RESULTS OF ALL REGIONS

Dependent Constant 11.916 (4.83)**	CAR -0.03	FCIR	ET 0.008 (0.14)	R2 0.563	D.W 2.36	SE 0.994
** indicat SE is the	tes signif standard	cance at t ficance at error of t cs are in p	the 1 pe he equat	rcent l ion.	vel. evel.	

with the decreased foreign capital inflows, mainland China's modernization drive undoubtedly has been seriously impeded.

Notes

1. The major reason for mainland China's decision to allow foreign investment in its economy was the expectation that such an outward-looking policy would facilitate technology transfer. Compensation trade, called product buy-back, through which mainland China absorbs foreign investment, brings in advanced equipment and technology, and makes payments by means of the goods produced. Chinese leasing companies are financing-trade economic entities. The lessee in mainland China tells the leasing company the kind of goods it needs, which are normally capital goods. The leasing company buys the goods at home or from abroad at its expense and leases them to the lessee. The rent, interest, and payback period are all stated in the leasing contract (*The China Investment Guide 1986*, pp. 318–320).

2. Indirect investment by Taiwanese firms in mainland China has grown rapidly in recent years. In 1988, that came to 0.2 billion U.S. dollars (*Dagong Bao*, March 13, 1989). But that is likely to slow down in the aftermath of the latest political crisis.

3. National income available is defined as the final income of material production sectors and nonmaterial production sectors and of individuals, after the national income produced is distributed and redistributed in the society. Capital accumulation is that part of national income used for expanded reproduction, non-productive construction and the increase in the productive and non-productive stocks of the society (*Statistical Yearbook of China 1987*, p. 798).

4. National income is the sum of the net output value of agriculture, industry, construction, transport, and commerce, obtained by deducting the value the material consumption of those sectors from the total product of society (*Statistical Yearbook of China 1987*, p. 798).

References

- Areskoug, K., "Foreign Capital Utilization and Economic Policies in Developing Countries." *Review of Economics and Statistics* 55 (May 1973): pp. 182–189.
- Bhagwati, J. N., Dependence and Interdependence (Oxford: Basil Blackwell Ltd, 1985).
- Chenery, H. B. and Adelman, I., "Foreign Aid and Economic Development: The Case of Greece." *Review of Economics and Statistics* 48 (Feb 1966): pp. 1–19.
- Chenery, H. B. and Strout, A., "Foreign Assistance and Economic Development." *American Economic Review* 56 (Sept 1966): pp. 679–733.

The China Investment Guide, Beijing: China International Economic Consultants, Inc. 1986. *Dagong Bao* (Dagong Daily), 15 April 1986.

-----, 13 March 1989.

- Editorial Board of the Almanac of China's Economy, Almanac of China's Economy 1982–1986, (Beijing: Jingji Guanli Press).
- Editorial Board of the Almanac of China's Foreign Economic Relations and Trade, *Almanac of China's Foreign Economic Relations and Trade 1984–1988.* (Beijing: China Resources Trade Consultancy Co., Ltd.).
- Fan, Shaochuo., Liyong waizi de lilun yu shijian (Theory and Practice for Utilization of Foreign Capital Inflows), (Fujian: Renmin Press, 1984).
- Griffin, K. B. and Enos, J. L., "Foreign Assistance: Objectives and Consequences." *iconomic Development and Cultural Change* 18 (1970): pp. 313–327.
- Grub, P. D. and Lin J. H., "Foreign Investment in China: Myths and Realities." *Journal of Economic Development* 13 (Dec 1988): pp. 17–40.
- Gualti, U., "Effects of Capital Imports on Savings and Growth in Less Developed Countries." *Economic Inquiry* 16 (1978): pp. 563–569.

Guangming Ribao (Guangming Daily), 11 June 1984.

- Gupa, K. L., "Foreign Capital Inflows, Dependency Burdency and Saving Rate in Developing Countries: A Simultaneous Equation Model." *Kyklos* 28 (1975): pp. 358–374.
- Gupa, K. L. and Islam, A. M., Foreign Capital, Savings and Growtb (Holland: D. Reidel Publishing Company, 1983).
- Jingji Daobao (Economic Reporter), 1982 (Aug 1986): p. 26.
- Kindleberger, C. P. and Herrick, B., *Economic Development* (New York: McGraw-Hill Book Company, 1977).
- Kuo, S. W. Y., The Taiwan Success Story, (Colorado: Westview Press, Inc. 1981).
- -----, The Taiwan Economy in Transition (Colorado: Westview Press, Inc. 1983).
- Lin, P. J. K., "Development Guided by Values: Comments on China's Road and Its.Implication." International Development Review 1 (1975): pp. 2–7.
- Liu, Xiangdong., Lou Yongkuan., Liu, Kalin., and Tian, Liewei., Woguo liyong waizi gaikuang (Mainland China's Utilization of Foreign Capital Inflows) (Beijing: Renmin Press, 1984).
- Ma, Hong., "Some Issues Concerning Special Economic Zones' Development and the Opening of Coastal Cities." *Chengsbi Quibua* (City Planning Review) 2 (Feb 1985): pp. 3–5.
- Mao, Zedong., "On the Correct Handling of Contradictions Among the People." Mao Zedong Xuanji (Selected Works of Mao Zedong), vol. V. (Beijing: Renmin Press, 1977).
- Moore, W. E., "Modernization as Rationalization: Processes and Restraints." *Economic Development and Cultural Change* 25 (1977), Supplement: pp. 29–42.
- Mosely, P., "Aid, Saving and Growth Revisited." Oxford Bulletin of Economics and Statistics 42 (May 1980): pp. 79–95.
- Oborne, M., China's Special Economic Zones (Frances: OEDC, 1986).
- Papanek, G. H., "Aid, Foreign Private Investment, Savings and Growth in Less Developed Countries." *Journal of Political Economy* 81 (Jan/Feb 1973): pp. 120–130.
- Ram, R., "Foreign Capital, Savings and Economic Growth: An Agnostic Note." *Economic Inquiry* 18 (July 1980): pp. 514–518.
- Renmin Ribao, People's Daily. 1 March 1989.
- Rosenstein-Rodan, P. N., "International Aid for Underdeveloped Countries." *Review of Economics* and Statistics 43 (Feb 1961): pp. 107–138.
- Seng, Chaorong., "Ten Significant Changes on Economy and Society during the Sixth Five-Year rlan." Jingji Daobao (Economic Reporter) 1938–39 (Oct 1985): p. 22.
- State Statistical Bureau, *Statistical Yearbook of China 1983–1986* (Beijing: China Statistical Information & Consultancy).
- Stoneman, C., "Foreign Capital and Economic Growth," World Development 3 (Jan 1975): pp. 11–26.
- Wang, Linsheng and Chen, Yujie., "Economic Relations with Foreign Countries." in Yu, Guangyuan ed., *China's Socialist Modernization* (Beijing: Foreign Languages Press, 1984).
- Wang, N. T., China's Modernization and Transactional Corporations (Lexington: 1984).
- Weiskopf, T. E., "The Impact of Foreign Capital Inflow on Domestic Savings in Underdeveloped Countries." *Journal of International Economics* 2 (Feb 1972): pp. 25–38.
- Zhou, Enlai., "Report on Government Work." Zbou Enlai Xuanji (Selected Works of Zbou Enlai), (Beijing: Renmin Press, 1984).

The Rise and Fall of Violence Theories

COUNTLESS BOOKS promise in their titles a lot more than they actually deliver. Not so, *Theories of Civil Violence*, (Berkeley: University of California Press,