Land Taxation and Economic Growth in China, 1928-1936

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Source: *Land Economics*, May, 1956, Vol. 32, No. 2 (May, 1956), pp. 180-183

Published by: University of Wisconsin Press

Stable URL: https://www.jstor.org/stable/3159761

# Land Taxation and Economic Growth in China, 1928-1936

## *I. Introduction*

UNDERDEVELOPED economies are typically caught in the so-called "vicious circle of poverty," a circle running from low income to small savings to small capital accumulations to a continuation of low income. To help break out from this predicament, taxation has the positive role of forcing a higher rate of savings from the meager income of these countries.

Between 1928 and 1936, a period of nine fiscal years during which accelerated industrialization was the major economic objective of the Nationalists, numerous reforms were made in the Chinese tax system to increase its revenue productivity. Yet even as late as 1936, the combined tax collections of all levels of Chinese government amounted to no more than four percent of China's gross national product. This fact, which can be seen from Table I, is surprising, since the corresponding percentages for other underdeveloped economies have been found to be considerably higher. For example, tax collections as a percentage of gross national product in post World-War-II India were reported to have been as high as ten percent.[1] Again, in Guatemala and Chile, the figures for the national government alone were reported to have been 9.3 and 11.4 percent respectively.[2] Why then was the Chinese tax system during the Nanking period[3] unable to absorb a larger percentage of China's gross national product?

One possible answer to this query could be that the expenditures of the Chinese governments were not contributing much to the immediate consumptive needs of the people. If that was the case, the proportionate taxable capacity[4] would be low in a poor country like China. In this connection it is pertinent to note that the Chinese national government, which was financially far more important than the provincial and hsien (county) governments combined, devoted roughly 44 percent of its total expenditures during the Nanking period to military purposes.[5] This fact, it seems, must be taken into account in explaining China's inability to collect a larger share of her gross national product in taxes.

TABLE I—COMBINED BURDEN OF NATIONAL, PROVINCIAL, AND "HSIEN" TAXATION: FISCAL YEAR 1936

| Levels of Government | Total Tax Revenues (In thousands of Chinese dollars) | Per Capita Tax Revenues[4] (In Chinese dollars) | Total Tax Revenues as a Percent of GNP[5] |
|---|---|---|---|
| National[1]..... | 755,154 | 1.51 | 2.9 |
| Provincial[2], [3].. | 216,337 | 0.43 | 0.8 |
| Hsien (County)[3] | 97,168 | 0.22 | 0.3 |
| Total..... | 1,068,659 | 2.16 | 4.0 |

[1] Actual collections.

[2] All provinces except Sikang, Szechuen, Sinkiang and Japanese occupied northeastern provinces.

[3] Budgetary estimates.

[4] The Chinese population was estimated at 450,000,000.

[5] GNP for roughly comparable area was estimated by T. C. Liu at $25,850 million. See his *China's National Income, 1931-1936* (Washington, D. C., Brookings Institution, 1946), p. 10.

*Source:* For national tax revenues, China, Ministry of Finance, *Annual Reports;* for provincial tax revenues, China, Tsai Cheng Pu, *Tsai Cheng Nien Chien,* Hsu Pieng (Chungking: Kai Chu, 1954), Part XII, Ch. II, pp. 16-104; for hsien tax revenues—Te-huai Chia, *Min Kuo Tsai* Cheng *Chien Shi* (Changsa: Commercial Press, 1941), II, 642-645.

But there is another explanation which, the writer feels, was at least of equal importance and which has received only scant attention. Specifically, it was the failure of the Chinese government to tax agricultural income more heavily. Even as late as 1936, land tax receipts totaled only $188 million. The meagerness of this sum becomes apparent

[1] United Nations, *Mobilization of Domestic Capital in Certain Countries of Asia and the Far East,* Doc. ST/ECAFE/4 (July, 1951), pp. 69-70.

[2] John H. Adler, Eugene R. Schlesinger, and Earnest C. Olson, *Public Finance and Economic Development in Guatemala* (Stanford: Stanford University Press, 1952), p. 62, Table 19.

[3] For convenience, the period 1928-1936 may be referred to simply as the Nanking period, since during those nine years Nanking, not Peiping, was the capital of China.

[4] By "the proportionate taxable capacity" is meant the maximum percentage of real national product that can be withdrawn by the government and still leave the private sector with enough to satisfy its indispensable needs, excluding those satisfied by the government. Cf., Simon Kuznets, "National Income and Taxable Capacity," *American Economic Review,* Papers and Proceedings, XXXII (March 1942), 42.

[5] Douglas S. Paauw, "Chinese National Expenditures during the Nanking Period," *The Far Eastern Quarterly,* XII (November 1952), 9.

when one realizes that in 1936 as much as 70 percent of China's gross national product of $25.9 billion was generated by the agricultural sector and that the land tax was the only tax directly reaching agricultural income throughout the Nanking period.

How was the land tax levied? What was its place in the Nanking tax system? Who ultimately paid the tax? How heavy was the burden of this tax on the agricultural sector of the economy? What light does a study of this tax shed on the low revenue productivity of the Nanking tax system? These are the questions which this paper will attempt to answer.

## *II. The Land Tax in the Nanking Tax System*

Under the traditional Chinese land tax, land was classified into nine categories on the basis of its fertility. Tax rates, which were conceived of as so many dollars per *mou* (the equivalent of 0.152 acre), varied directly with fertility. Thus, the tax was basically a crude attempt to tax agricultural income on a proportional basis.

During the Nanking period this land tax was a part of the tax systems of provincial and hsien governments. It should be noted, however, that prior to 1928 the tax was a national levy yielding roughly one-fifth of total national tax receipts.[6] Then, in 1928 when the separation between national and local revenues was made for the first time in the history of China's public finance, the land tax was transferred to the provincial governments in exchange for their claims on the *likin*[7] revenue. The purpose of the exchange was to remove provincial objections to the abolition of *likin*. But, in the separation of revenues, no provision was made for hsien governments. As a result, hsien governments resorted to collecting surcharges on provincial taxes throughout the Nanking period.

As far as revenue is concerned, the importance of the land tax to both the provincial and hsien governments can hardly be overemphasized. Table II seems to bear out the truth of this statement in regard to provincial finance. It is interesting to note that in all years except one during 1931-1936 land tax exceeded 50 percent of total tax receipts in provincial budgets. As to the place of land surtaxes in hsien finances, hsien budgets of 1936 put land surtaxes at $76.6 million, or roughly 72 percent of total hsien tax receipts.[8]

## *III. The Burden of the Land Tax*

The burden[9] of the land tax on the agricultural sector of the Chinese economy depends partly on the actual amount of tax revenue collected and partly on two other considerations: the size of agricultural income and the incidence of the tax. The incidence of the Chinese land tax, it seems, can best be studied by first examining what fiscal theorists have said in general concerning the incidence of taxes on agricultural land.

If all agricultural lands are taxed uniformly without any regard to their quality, fiscal

TABLE II—LAND TAX RECEIPTS IN PROVINCIAL BUDGET (EXCLUSIVE OF MANCHURIA): FISCAL YEARS 1931-1936

| Fiscal Year | Amount (In millions of Chinese dollars) | Per Cent of Total Provincial Tax Receipts |
|---|---|---|
| 1928-1930.... | Not available | Not available |
| 1931[1]..... | 86.85 | 57.6 |
| 1932[2]..... | 81.71 | 55.2 |
| 1933[3]..... | 69.36 | 51.3 |
| 1934[4]..... | 69.34 | 48.5 |
| 1935[5]..... | 92.83 | 54.8 |
| 1936[6]..... | 111.58 | 51.5 |

[1] Includes all provinces except Kiangsi, Szechuen, Kansu, and Kweichow.

[2] Includes all provinces except Kwantung, Szechuen, Shensi, and Kweichow.

[3] Includes all provinces except Shansi, Kwantung, Kwansi, Szechuen, Shensi, Kansu, and Sinkiang.

[4] Includes all provinces except Shansi, Kwantung, Kwansi, Szechuen, Shensi, and Sinkiang.

[5] Includes all provinces except Kwantung, Kwansi, Szechuen, Yunnan, Sinkiang, and Sikang.

[6] Includes all provinces except Sikang, Szechuen, and Sinkiang.

*Source:* Compiled from provincial budgets. For a reproduction of 1931-1934 budgets, see P. T. Chen, "Public Finance," *Chinese Year Book 1935-1936* (Shanghai: Chinese Year Book Publishing Co., 1936), pp. 1385-1387. For a reproduction of 1935 budgets, see P. T. Chen "Finance," *Chinese Year Book 1936-1937* (Shanghai: Chinese Year Book Publishing Co., 1937), pp. 704-706. For a reproduction of 1936 budgets, see China, Tsai Cheng Pu, *Tsai Cheng Nien Chien*, Hsu Pieng, Part XIII, Ch. II, pp. 14-104.

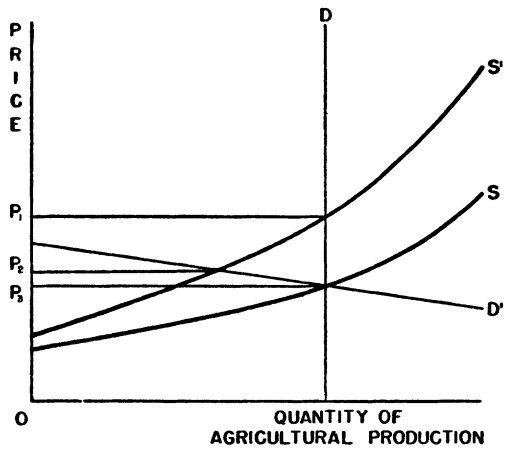
[6] In the budget for fiscal year 1925, the national government put land tax at $90.1 million, roughly 23 percent of its total tax receipts. See China, Tsai Cheng Pu, *Tsai Cheng Nien Chien* (Shanghai: Commercial Press, 1935), Part III, Ch. II, p. 119.

[7] The term *likin* refers to taxes levied on the internal movement of commodities.

[8] Te-huai Chia, *Min Kuo Tsai Cheng Chien Shi* (Changsa: Commercial Press, 1941), II, 642-645.

[9] The word "burden" is used in the sense that taxes force a diversion of purchasing power from voluntary personal use and thus restrict the area of private disposal of income. See William J. Shultz and C. Lowell Harriss, *American Public Finance* (New York: Prentice-Hall, Inc., 1954), p. 251.

theorists have traditionally argued that, depending on the elasticity of demand for agricultural products, an amount more than the tax, equal to the tax, or less than the tax would be shifted forward to consumers.




Diagrammatically, a uniform tax according to the quantity of land raises the supply curve of agricultural products from S to $S^1$ in Figure 1. Since the unit cost for the less efficient producers is raised to a greater extent than that of the more efficient producers by a tax on the area of land, the vertical distance between the two supply curves increases with quantity produced. David Ricardo[10] and Edwin R. A. Seligman,[11] by assuming a perfectly inelastic demand for agricultural products, both argued that the price increase $P_1$ $P_3$ will be more than the tax-induced increase in unit cost except for the marginal producers. They concluded, therefore, that more than the total tax collection was passed on to consumers. Von Mering,[12] on the other hand, pointed out the possibility that, if the demand was sufficiently elastic, the price increase $P_2$ $P_3$ might be so small that it would be less than the tax-induced increase in unit cost even for the most efficient producers. In that case, less than the total tax collection would be shifted to consumers.

However, if the rate of land tax payable on the quantity of land varies with its quality, the position of $S^1$ in Figure 1 would be a constant distance above S. For von Mering,[13] this meant that no benefits would accrue to the more efficient producers and that with a demand curve less than perfectly inelastic, the amount shifted to consumers would always be less than the total tax collection. For Ricardo[14] and Seligman,[15] both of whom assumed a perfectly inelastic demand, this meant that the entire amount of the tax, no more and no less, would be paid by consumers.

Which of the above theoretical conclusions is applicable to the Chinese land tax? The answer is "neither." For, in arguing the complete or partial shifting of the land tax, Ricardo, Seligman, and von Mering assumed that the landlord at the margin of cultivation would abandon his farm after the imposition of the tax and transfer his labor and capital to some other lines of activity.[16] This assumption, however, is an unrealistic one to make in studying the land tax in traditional China. To understand why, it is necessary to examine briefly the forces which determine the occupational distribution of those who work.

Theoretically speaking, within the broad limits set by nature a worker will choose that occupation which maximizes his net advantages.[17] These net advantages consist of the net money income of an occupation plus any non-pecuniary advantages minus any such disadvantages. In traditional China, farming was not merely an occupation, it was a highly respected way of life. On the social ladder, the farmers' position was second only to that of the literati. Now, as Simon Rottenberg has pointed out,[18] where social-prestige factors are involved, price changes and relative prices may have a negligible influence on the labor supply to any particular trade. It is therefore the present writer's hypothesis that the supply of farmers in traditional China was extremely inelastic with respect to pecuniary returns.

[10] See David Ricardo, *The Principles of Political Economy and Taxation* (Everyman Library ed.; London: J. M. Dent and Sons, 1911), p. 116.

[11] See Edwin R. A. Seligman, *The Shifting and Incidence of Taxation* (5th ed.; New York: Columbia University Press, 1927), p. 259.

[12] See Otto von Mering, *The Shifting and Incidence of Taxation* (Philadelphia: The Blakiston Co., 1942), pp. 154-155.

[13] See von Mering, *op. cit.*, p. 155.

[14] See Ricardo, *op. cit.*, p. 120.

[15] See Seligman, *op. cit.*, p. 260.

[16] In discussing a tax on agricultural net profits, Seligman made this assumption explicit. See his *op. cit.*, p. 262.

[17] George J. Stigler, *The Theory of Price* (New York: The Macmillan Co., 1947), p. 187.

[18] Simon Rottenberg, "Income and Leisure in an Under-Developed Economy," *Journal of Political Economy*, April 1952, 101.

Nor was it probable that the Chinese land tax reduced the supply of agricultural products by inducing the Chinese farmers to exert less effort. For, at near-subsistence standards of living, the marginal rate of substitution of leisure for income is likely to be exceedingly low. Any tax induced leisure-taking in traditional China was therefore unlikely to have been significant.

From the above analysis, the following conclusion regarding the incidence of the Chinese land tax is reached. Since the supply of agricultural products was for all practical purposes unaffected by the land tax, forward shifting through higher agricultural prices could not have taken place. The burden of the tax, therefore, rested on the agricultural sector of the economy.

The fact that the Chinese land tax was not shifted forward to consumers should not, however, lead one to think that the tax bore heavily on the agricultural sector of the economy. That the converse was true can be demonstrated in the following way. During 1931-1936, the average annual land tax receipt was $161 million[19] while the average annual gross product from agriculture was $17.07 billion for a roughly comparable area.[20] Therefore, even assuming that the land tax rested entirely on the agricultural sector, the relative burden as measured by the average tax rate would only have been approximately one percent of the gross agricultural product.

This state of affairs, it is significant to point out, stood in sharp contrast to the fiscal experiences of certain other underdeveloped countries. For example, when Japan started to industrialize in the second half of the 19th century, heavy land taxation was the device used to wrest sufficient savings from the private sector to finance developmental programs. The tax absorbed as much as 13 percent of the value of a normal crop.[21] Again, as recent statistics seem to indicate, the burden of the Indian land tax has been approximately 10 percent of India's net agricultural output.[22]

*IV. Summary and Conclusion*

In underdeveloped economies taxation is assigned the positive role of augmenting the flow of savings from the low income of these countries. However, in spite of numerous measures to improve its revenue productivity, the Chinese tax system during the Nanking period was able to absorb no more than four percent of China's gross national product. This was a very low figure compared with the corresponding percentages of other underdeveloped economies.

During the Nanking period the land tax was the pillar of provincial and hsien (county) finances. Its average burden on the agricultural sector, however, was only one percent of gross agricultural product. Since 70 percent of China's gross national product originated from agriculture and since the land tax was the only tax directly reaching agricultural income, the lightness with which the land tax was levied offers an important clue as to why the Nanking tax system was so unproductive of revenue.

Finally, it seems clear from the above analysis that during the Nanking period the Chinese tax policy toward agricultural income was grossly inconsistent with the Nationalists' announced objective of accelerated economic growth.

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[19] During 1931-1936, the average annual land tax revenue in provincial budgets was $85 million. And in 1936, land surtaxes in hsien budgets stood at $76 million.

[20] See Liu, *op. cit.*, p. 10.

[21] Bruce F. Johnston, "Agricultural Productivity and Economic Development in Japan," *Journal of Political Economy*, LIX, Dec., 1951, 502.

[22] In 1950-1951, land tax receipts in India totaled 515.8 million rupees. See Phiroze Irani, "Structure and Taxation of Agriculture in India and Pakistan," in Haskell P. Wald (ed.), *Papers and Proceedings of the Conference on Agricultural Taxation and Economic Development* (Cambridge: Harvard University Printing Office, 1954), p. 386, Table 7. In 1948-1949, the only year for which national income data are available, net agricultural product was 41.5 billion rupees. See United Nations, *Statistics of National Income and Expenditure*, Statistical Papers, Doc. ST/STAT/SER. H/5, February, 1954, p. 33.

# The Mortgage Market of Middletown, Connecticut

URBAN mortgage lending has long been characterized by extreme localization. Despite efforts of federal agencies to increase the inter-market mobility of mortgage loan funds, this localization of the mortgage lending process has prevailed. Yet data on mortgage lending available to the student of mortgage markets usually cover the entire