

Land Reform in the Philippines and Taiwan in the First Half of the Twentieth Century

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1. Introduction

Land reform, frequently regarded as a prerequisite for economic development, is difficult to achieve in traditional societies dominated by landowning elites. Consequently it has often been implemented only as a result of external intervention, such as rule by a colonial power. This paper compares the reforms adopted by colonial powers in Taiwan and the Philippines during the first half of the twentieth century. In Taiwan the Japanese authorities implemented a successful land reform which was later extended by their Guomingdang successors, but in the Philippines the U.S. authorities were less successful in implementing reforms.¹ The paper discusses the importance of land reforms for economic development in the two countries and considers explanations for the differences in their experiences.

Since the 1960s Taiwan has been more successful than the Philippines in achieving export-led industrialization but in the first half of the twentieth century the two countries possessed a number of similarities. Both were tropical countries and major producers of rice and sugar cane and in the first four decades of the twentieth century each achieved relatively high

¹ For the effectiveness of land reform in Taiwan see Amsden (1979) and Ho (1982).

rates of growth in exports and GDP per capita through the sale of agricultural products to their respective colonial rulers.² The apparent similarities, however, were balanced by significant differences in the agricultural sector, particularly with respect to land ownership.

Land policy in Taiwan during the period of Japanese rule (1895-1945) had both immediate impacts on the agricultural economy and longer-term effects on the development of that country's distinctive industrial structure, with its prevalence of small and medium-sized manufacturing firms. The longer-term effects were a result of further reforms implemented by the regime which succeeded that of Japan. One of the most important results of the Japanese reforms is that they eased the path for subsequent land reforms undertaken by the Guomindang government after World War II, the end result of which was the emergence of a high productivity agricultural sector dominated by numerous small producers. This sector provided both a market for domestically manufactured goods and a localized labour force available to small, geographically dispersed firms.

In contrast to the Japanese in Taiwan, the U.S. administration of the Philippines between 1898 and 1941 largely failed to achieve a successful reform, in part because American rule depended on the cooperation of local elites. This had implications not only for agriculture in the Philippines but also for the structure of manufacturing, which was (and is) more geographically concentrated than was the case in Taiwan.

This paper undertakes a comparative analysis of changes in the structure of landholding

² Between 1900 and 1929 GDP per capita increased by 42.6% (1.2% per annum) for Taiwan and by 51.4% (1.5% per annum) for the Philippines. Taiwan, however, performed better than the Philippines during the depression years between 1929 and 1938, achieving an increase in GDP per capita of 19.3% during this period, compared with a fall of 4% for the Philippines. See Maddison (1995), table D-1e.

in Taiwan and the Philippines during the period in which both were subject to colonial rule and comments on the implications for future industrial development. The paper is organized as follows:

Section 2 provides an overview of the role of externally imposed institutions in determining the path of economic development of countries subjected to colonial rule.

Section 3 discusses agricultural policy in Taiwan under Japanese colonial rule and its implications for the later development of agriculture and manufacturing. The land reforms of the Japanese and Guomingdang periods and their contribution to the prevalence of small and medium-sized businesses in Taiwan are analyzed.

Section 4 discusses the failure of land reform during the period of U.S. rule in the Philippines.

Section 5 provides the conclusion.

2. Role of Institutions

Any analysis of the long-term development of an economy must take account of the effect of institutional factors such as land policies and the tax structure on the path taken by that economy. In the context of colonial economies an obvious issue is the effect of externally imposed institutions on their evolution. Even without significant population transfers the process of colonization will have effects on factor endowments as a result of changes of ownership, the introduction of new production methods, and the transplanting of legal and political structures. If population transfers take place the impact is even greater.

Engerman and Sokoloff (2003, 2005) focus on the role played by institutions in the

Americas. New World colonies were subject to colonial rule for long periods of time, generally extending over centuries. Since they generally attracted migrants from the metropolitan country, it is to be expected that colonists would have an influence over policy making and hence the evolution of institutions over time. Under these conditions, as Engerman and Sokoloff point out, there is a strong case for regarding the institutions established by the colonial rulers as endogenous in that they evolved over time in response to local pressures. In Asia the situation is not so clear. Some Asian countries, such as India and Indonesia, were subject to colonial rule for a long period but others experienced relatively brief periods of colonial rule so that an assumption that externally imposed institutions were exogenous, rather than endogenous, has more plausibility.

While a considerable amount of attention has been given by Engerman and Sokoloff and others to the effect of the imposition of European institutions on the paths of development taken by New World economies, much less account has been taken of the effects of colonial rule on the economic evolution of Asian countries. This paper examines the experience of two such Asian countries. In the case of Taiwan, Japanese colonial rule lasted barely fifty years (1895-1945) and was characterized by an administration that was responsive to Japanese rather than Taiwanese interests. Throughout the whole period of Japanese rule the local Taiwanese elite was largely excluded from the larger industrial ventures, such as sugar processing, and confined to small-scale enterprises, such as rice milling, while all but the lowest administrative positions in the government were monopolized by the Japanese.³ Japanese rule therefore represented a sharp break with the pre-colonial past. As will be seen, the Japanese intervention could be regarded as an external shock which had beneficial long-term effects on the path of economic development,

³ Clark (1989), pp 60-61.

although some of these effects, such as a relatively equal distribution of income and wealth were not fully evident until after the end of Japanese rule.⁴

The other country examined in this paper is the Philippines, which had a very different historical experience. Although the Philippines was subject to American rule for a period of similar duration to Japanese rule in Taiwan (1898-1941), in terms of institutional evolution it is more comparable to the New World economies referred to above. The United States certainly introduced institutional changes, including new land laws, but because these changes were at best only partially implemented the institutions of the U.S. era functioned to a large extent as a continuation of practices which had emerged during the preceding centuries of Spanish rule, reflecting the interests of the Filipino elite. The lack of an exogenous shock similar to that experienced by Taiwan meant that the Philippines moved along a development path which favoured a small landowning elite.

This has long-term implications for economic development since a number of empirical studies have found that a high degree of concentration in land ownership is generally associated with low economic growth.⁵ A number of explanations for this phenomenon have been proposed. Galor et al (2006) attribute this correlation of land concentration and low growth to a desire by landlords to prevent an exodus of labour off the land and into industrial production. As a result they have no interest in promoting state sponsored education. Adamopoulos (2008) focuses on

⁴ External shocks associated with colonial intervention need not, of course, be beneficial or result in a more equitable distribution of land ownership. In the Permanent Settlement of Bengal (1793) the British registered local tax collectors (zamindars) as owners of the land in their district. As a result the zamindars eventually developed into a class of wealthy absentee landlords. See Kuhn (1982), pp 60-66.

⁵ Recent examples of these empirical studies include those of Alesina and Rodrik (1994) and Deininger and Squire (1998).

the political process, formulating a model in which, if land ownership is sufficiently concentrated, landowners will be successful in lobbying the government to raise barriers to industrialization in order to protect their rents in the rural economy.

3. Taiwan

As a result of its victory in the Sino-Japanese War (1894-95) Japan acquired control of Taiwan (then called Formosa). This led to the introduction of a centralized, interventionist state on the Japanese model. Politically there was no anticipation of eventual independence for Taiwan and economically Japan developed its new acquisition as complementary to itself. Although in this respect Japanese colonial policy resembled that of the European powers of the time, in some respects the experience of Japan's new possession differed from that of other Asian colonies. One of the most significant features of Japanese occupied Taiwan was the commercialization of rice and sugar production by small farmers. In the European colonies there was often a sharp division in the agricultural economy between rice production for local consumption and an export sector with limited spillover on subsistence agriculture, but in Taiwan, in contrast, many small rice farmers produced both for local subsistence and for export to Japan. Small farmers also played a major role in the production of sugar cane for export. The commercialization and modernization of this export-oriented agriculture was promoted by the Japanese authorities through reforms in the land tenure and taxation systems and by the promotion of agricultural associations. Each of these factors will be discussed below.

Land Reform

When Japan assumed control of Taiwan much of the colony operated under a three-tier tenancy system, consisting of great landlords, tenant landlords, who paid a fixed rent, and subtenants, who paid in kind to the tenant landlords. Property rights were often unclear under this system, which made it difficult to collect taxes or make land transactions. In order to increase agricultural productivity and allow for the more efficient collection of taxes the Japanese administration undertook a land reform which ended the three-tier tenancy system. The great landlords were removed and the tenant landlords became the legal owners of the land with responsibility for taxes. Removal of the great landlords was made easier by the fact that they were generally based on mainland China so that, in contrast with the situation in Korea, its other colonial possession, Japan gained no benefit from cooperation with the great landowners. The reforms also included a land survey, which was completed in 1905. Though, as pointed out by Clark, this did not radically change the basic institutions of rural life, it did clarify property rights and made it easier for the Guomindang to introduce more radical land reforms after 1949.⁶ The resulting distribution of land can be seen from Table 1, from which it is apparent that considerable inequality continued to exist throughout the Japanese period, with 46.2 % of total farming families owning less than 12 % of total land in 1939. It can also be seen, however, that the bulk of the land was owned, not by large landowners, but by small and medium sized farmers with land holdings of between 1 and 10 jia,⁷

⁶ Clark (1989), p 56. See Amsden (1979) for a more detailed account of the successive land reforms in Taiwan.

⁷ 1 jia = 0.97 hectares.

Table 1.

Distribution of Land in Taiwan in 1920 and 1939

	<u>1920</u>		<u>1939</u>	
	<u>Proportion</u> <u>of Families</u>	<u>Proportion of</u> <u>Total Land</u>	<u>Proportion</u> <u>of Families</u>	<u>Proportion of</u> <u>Total Land</u>
<u>Size of Farms</u>	(%)	(%)	(%)	(%)
Less than 1 jia	53.1	15.0	46.2	11.6
1 jia to less than 10 jia	46.0	69.5	53.0	74.3
Over 10 jia	0.9	15.5	0.8	14.1

(Source: Calculated by author from data in Chen (1951), Table IV, p. 441, and Huang (2006), p.

41)

Taxation

The (formerly tenant) landlords now paid a flat tax rather than the previously levied proportional tax on output, which was considered a disincentive to agricultural improvement. Nevertheless, from the point of view of the tenants (previously subtenants), the system remained very inequitable, with ground rents often amounting to 50% or more of the tenant's main crop yield.

Agricultural Associations

Agricultural associations, supported by the government and rich landlords, were established to provide small farmers with technical education and assistance in the cooperative purchase of fertilizers. Government support was not simply financial. The police were used to force modern techniques onto rural communities which resisted change. The result was improved crop yields through the application of better technology, fertilizers, and other inputs.

The success of these agricultural reforms can be seen from Table 2, which shows indicators of agricultural development in constant Taiwanese dollars.

Table 2

Indicators of Agricultural Development

(in constant Taiwan dollars at 1935-37 value)

Year	Agricultural Production		Agricultural Investment		Farm Household Income	
	Per Worker		Per Worker		Per Capita	
	T\$	Index	T\$	Index	T\$	Index
1911	156	100	8	100	49	100
1915	148	95	6	73	46	95
1920	172	110	10	135	50	103
1925	238	153	24	315	72	148
1930	258	165	23	308	72	148
1935	289	185	12	155	82	170
1940	290	186	31	408	81	168

(Source: Table 3.1, p. 56, Clark (1954))

Guomingdang Land Reforms

The Japanese land reform and the 1905 land survey were prerequisites for subsequent reforms introduced by the Guomingdang government after its relocation from mainland China in

1949. The Guomindang land reforms took place in three stages. Firstly, in 1949 farm rent was limited to a maximum of 37.5% of the main crop yield. Secondly, in 1951 public land previously owned by Japanese nationals was redistributed, mostly to tenants. Finally, in 1953 landlords were forced to sell all their landholdings above a minimum size to their tenants under the Land-to-the Tiller Act. This marked the end of the landlord class and the emergence of a large number of small but efficient cultivators. As was the case with the more limited Japanese land reform half a century earlier, the expropriation of the landlords was made easier by the fact that the government had no interest in gaining their support. Guomindang leaders, coming as they did from mainland China, felt no obligation to the local elite. An important consequence of the reform was that income distribution in Taiwan became much more equal than in most less developed countries, a fact which had implications for the pattern of industrial development.⁸

Manufacturing

After World War II cut off traffic between Taiwan and Japan there was some development of local manufacturing to produce goods previously imported from Japan but generally industrial development under Japanese rule was limited to food processing. It was only after World War II and particularly from the 1960s that rapid industrialization occurred. When industrialization eventually did occur the existence of high productivity small-scale agriculture benefitted the manufacturing sector in the following ways:

- (1) An efficient agricultural sector produced an adequate food supply for domestic

⁸ See Fei, Ranis, and Kuo (1979) for a detailed analysis of Taiwan's ability to achieve growth while maintaining a relatively equal income distribution.

consumption, which was a major factor in promoting price and wage stability.

(2) A high level of agricultural exports enabled the country to import inputs for export oriented manufactures.

(3) The agricultural sector provided a market for consumer goods and for domestically manufactured agricultural inputs, such as chemicals.

(4) Farm households acted as a source of labour for manufacturing firms. The share of off-farm work in farm household income increased from 13% in 1952 to 25% in 1962 and 43% in 1975.⁹

Thus the existence of small-scale agriculture, when combined with a Taiwanese cultural preference for self employment, led to the emergence of an unusual pattern of widely dispersed small manufacturing firms.¹⁰

4. The Philippines Under U.S. Administration

There are clear similarities between Taiwan and the Philippines during their colonial periods. Both relied on agricultural exports to the countries of their respective colonial rulers for foreign exchange and in both countries the majority of small farmers depended on rice production. There were, however, two major differences between them. Firstly, although both countries exported sugar, Taiwan was also a major rice exporter, as a result of which small rice

⁹ The interrelationships between agriculture and manufacturing in Taiwan since World War II are discussed in more detail by Amsden (1979) and Ho (1982).

¹⁰ The *laoban* tradition of small and medium-sized businesses is discussed by Numazaki (1997). The establishment of rural infrastructure by the Japanese and, later, the Guomindang also played a significant role.

farmers participated in international trade and benefitted from increases in international rice prices. In the case of the Philippines rice was imported as a means of suppressing domestic prices. Secondly, the Japanese authorities successfully implemented agricultural reforms in Taiwan. In the case of the Philippines the American authorities and their Filipino associates made attempts at reform but, as will be seen below, these were inadequate and largely unsuccessful.

Despite a respectable record of economic growth the Philippines was characterized by small farms and low agricultural productivity compared to some of its neighbours. The secretary of agriculture reported in 1931 that in that year Java produced yields of 240 piculs of sugar per hectare as compared with the Philippines production of only 85 piculs per hectare.¹¹ It was also pointed out that there were 21,000 planters occupying 260,000 hectares of sugar lands. Clearly, any improvement in Philippines agriculture would have required a land reform but, while some progress was made in this direction, it was insufficient to resolve the problem. That this was so was in part due to the objectives of the U.S. administration in governing the Philippines. The political objective was to introduce a democratic system with a view to the eventual achievement of independence, in contrast to Japan's intentions in Taiwan, which envisaged the permanent introduction of authoritarian rule. This necessitated the reaching of an accommodation by the U.S. authorities with the Filipino elite of merchants and landlords and, as a consequence, despite the best of intentions, the American administration was unable to make much progress in agrarian reform, as indicated below.

¹¹ One picul is equivalent to 63.26 kilos.

Land Reform

When the United States took control of the Philippines it inherited the chaotic land tenure system of the Spanish era, under which over 70% of farm holdings in 1896 were untitled to the families that cultivated them. The resulting uncertainty about ownership of the land prevented its being used as security in credit transactions.¹² The Philippines Commission, which exercised both executive and legislative power until the election of an assembly, duly enacted a land law, which came into force in 1904. The law placed within the public domain not only unoccupied land but also extensive land parcels already occupied, including both lands occupied by persons who had not perfected their titles under the Spanish laws and lands to which their occupiers had no legal claim at all. Under the law free patents were to be issued to Filipinos who had occupied, or whose ancestors had occupied, public lands before 13 August 1898. It was also indicated, however, ‘that no patents of award could be issued for homesteads, sales, leases, grants, and certification of title without land surveys conducted or recognized by the government’.¹³ Unfortunately the government could not undertake land surveys on the required scale since it had only a small surveyor staff in the lands bureau and while private surveys were also accepted, these were expensive.¹⁴ The resulting lack of clear title to their land prevented small farmers from obtaining credit and, in any case, widespread illiteracy put these farmers at a serious disadvantage relative to the larger landowners. In 1903 80% of the population was classified as illiterate and though the situation had improved by 1939 the adult illiteracy rate, at 51%, was still

¹² Clark (1989), pp. 46, 359 and Corpuz (1997), p. 287.

¹³ Corpuz (1997), p.275.

¹⁴ Ibid, p. 277.

high.¹⁵

By 1910, after seven years of operation, the land registration court had certified only 3,902 registered titles, of which most were those of persons who had some title under Spanish law. These individuals generally held medium to large-sized tracts and could afford to comply with the requirements of registration by hiring private surveyors to conduct surveys which would enable them to obtain certified titles in the land registration court. Two million small farmers, on the other hand, could not afford to hire surveyors and were therefore unable to obtain titles. The slow pace of land registration is indicated by the fact that by 1918 decrees in land registration cases since 1903 totaled 88,077 parcels of land with a total area of 894,875 hectares. This compares with an actual total of 1,955,273 farms and a total farm area of 4,563,727 hectares.¹⁶ The inability of the government to cope with the need to register land was at least partly due to the fact that from 1916 it depended on a Filipino legislature. Large landowners, who were influential in the Philippines legislature, both during the period of U.S. rule and since the achievement of independence, have generally obstructed attempts at land reform.

The new U.S. administration inherited from the Spanish rulers of the Philippines a highly unequal distribution of land, as is clear from the 1903 census. At that time the average size of all farms was only 1.60 hectares but large land holdings accounted for a disproportionate share of the cultivated land. By 1918 average farm size was even smaller, at 1.24 hectares, and the distribution of land remained highly unequal, as can be seen from Table 2. By 1939 there had been some improvement but land ownership was still very concentrated, with about 4% of farms

¹⁵ 1903 census, table 40; 1966 Yearbook of Philippine Statistics. In 1939 48.8% of Philippines residents over ten years of age were classified as literate.

¹⁶ Annual Report of the Governor-General, 1933, p.71; Census of 1918.

accounting for about 43% of the land.

Table 3.

Distribution of Land in the Philippines in 1918 and 1939

<u>Size of Farm</u>	<u>Proportion of Farms (%)</u>		<u>Proportion of Land (%)</u>	
	<u>1918</u>	<u>1939</u>	<u>1918</u>	<u>1939</u>
Less than 1 ha.	61.2	22.6	9.6	3.3
1 ha. to less than 10 has.	35.5	73.2	40.7	53.3
10 has. and larger	3.3	4.2	49.7	43.4

(Source: Author's calculations from data in the 1918 and 1939 censuses)

There was also a lack of progress in terms of land tenure. Between 1903 and 1918 the proportion of farms cultivated by their owners fell slightly from 81% to 78%. By 1939 the situation had substantially deteriorated, with only 51% of farms operated by full owners

When compared with Taiwan in 1939 the Philippines exhibited a similar rate of tenancy but greater concentration of land at the upper end, as is evident from Tables 4 and 5.

Table 4.**Land Ownership in Taiwan and the Philippines (1939) (%)**

	<u>Philippines</u>	<u>Taiwan</u>
Full owners	49.2	31.2
Part Owners	15.6	31.0
Tenants	35.2	37.8

(*Sources:* Author's calculations from data in Chen (1951), Table 3, and the Handbook of Philippine Statistics 1903-1959)

Table 5.**Land Distribution in Taiwan and the Philippines (1939) (%)**

<u>Philippines</u>			<u>Taiwan</u>		
<u>Farm Size</u>	<u>No. of Farms</u>	<u>Land Area</u>	<u>No. of Farms</u>	<u>Land Area</u>	<u>Farm Size</u>
Less than 1 ha.	22.6	3.3	46.2	11.6	Less than 1 jia
1ha. to less than 10 has.	73.2	53.3	53.0	74.3	1jia. to less than 10 jia
10 has. and larger	4.2	43.4	0.8	5.1	10 jia and larger

(*Sources:* Author's calculations from data in Chen (1951), Table 3, and the Handbook of Philippine Statistics 1903-1959)

Manufacturing

Differences in the pattern of land tenure and land distribution between Taiwan and the Philippines correspond to differences in the development of manufacturing in the two countries. In the period since World War II the Philippines has been characterized by a pattern of manufacturing which is more concentrated geographically than is the case for Taiwan. The agricultural reforms of the Japanese colonial administration, in combination with the Guomindang land reforms, resulted in the growth of a class of independent farmers in Taiwan, who provided a market and also a pool of labour for small and medium-sized local manufacturing firms. Failures in land reform in the Philippines provide an explanation for the different pattern of industrialization in that country.

Some evidence for this is provided by the Philippines censuses of 1903 and 1918, which break down data for the agricultural and manufacturing industries by province. The provinces corresponding to the modern regions of Cordillera and Eastern Visayas had the highest proportion of cultivated land farmed by owners in 1918 (86.2% and 86.1% respectively, compared to a national average of 74%). These two regions also saw the most rapid growth in manufactured output per capita between 1903 and 1918. Cordillera experienced a growth rate of 32% per annum between these two dates, while Eastern Visayas saw a growth rate of 39% per annum, compared with the national average of 11%. There is no evidence that either region was favoured by factors other than land tenure. Evidence on regional transportation infrastructure is limited and largely anecdotal but suggests that the two regions were as poorly served as most of the rest of the country in 1918. In terms of capital markets, the principal source of development finance was the Philippines National Bank (established in 1916), which favoured investment in

sugar mills¹⁷. This benefitted neither Cordillera, which specialized in tobacco production, nor Eastern Visayas, which specialized in production of copra and abaca.¹⁸ The one remaining advantage that the two regions had over other regions of the Philippines is that an unusually large proportion of the cultivated land was farmed by independent farmers and, as a consequence, the local influence of large landowners was limited. As a result they were less likely to hinder the development of local manufacturing enterprise in the manner suggested by Galor et al (2006) or Adamopoulos (2008).

5. Conclusion

Export-based agriculture is possible with an agricultural sector which exhibits low productivity and a highly unequal pattern of land ownership. Land reform does, however, seem to be necessary if a less developed country is to accomplish the transition from a low-income, agriculturally based economy to one based on manufacturing. This then gives rise to two questions. Firstly, how is land reform related to the development of manufacturing and, secondly, how is it to be achieved in the face of opposition from landlords? The first of these questions has been addressed on a theoretical basis in a number of studies, including those of Adamopoulos (2008) and Galor et al (2006). Through a comparative analysis of Taiwan and the Philippines this paper provides some empirical evidence for the argument that an agricultural sector dominated by small farmers, as in Taiwan, may result in the growth of a manufacturing sector characterized by small and medium sized firms.

¹⁷ See Corpuz, pp 259-260.

¹⁸Data extracted by author from the 1918 census of the Philippines.

The paper seeks to answer the second question through a comparative study of the two countries during the earlier part of the twentieth century, when both were subject to colonial rule. In the case of Taiwan the Japanese administration was able to force through a land reform with little difficulty since it had no interest in placating the great landlords, who were mostly resident in mainland China. For similar reasons the Guomindang government was later able to complete the work begun by the Japanese because, coming as it did from the mainland, it felt no obligation to Taiwanese landlords. Land reform in the Philippines during the period of American rule was much less successful than was the case in Taiwan, in large part because the U.S. administration governed in association with the local landowning elite. As a result it failed to force through reform and successive governments of the Philippines since independence have lacked the strength or will to do so. Thus the experience of these two Asian countries suggests that land reform is unlikely to be achieved without some foreign authority or strong external pressure to overcome the obstruction of local elites.

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