

Understanding Japanese Rural History in a Comparative Context: from Surplus Labour to the Labour-Intensive Path of Development

PENELOPE FRANCKS

1. INTRODUCTION

Although Japan has been for many decades one of the largest and most significant economies in the world, for many Europeans it remains a faraway and exotic place. At the same time, Japanese people have often portrayed their culture and society as ‘unique’ and beyond historical comparison with ‘the West’. Nonetheless, as the first country outside Europe and North America to achieve modern industrialisation, Japan ought to be a key example within any comparative analysis of the process of economic development, especially now that it has proved not to be a unique non-Western case. In relation to agriculture in particular, a rural environment and agrarian structure apparently very different from European models did not stand in the way of growth, any more than they have done in later Asian cases of economic development, suggesting that our understanding of the part that the rural economy can play in the process of industrialisation may need to be modified in the light of Japanese (and other subsequent East Asian) experience.

Received: 2010-09-01 • Revised: 2010-12-17 • Accepted: 2011-01-11

Penelope Francks is honorary lecturer at Department of East Asian Studies, University of Leeds; also Research Associate at School of Oriental and African Studies, London; and Visiting Senior Fellow at Department of Economic History, London School of Economics. Postal address: Department of East Asian Studies, University of Leeds, Leeds LS 9JT, UK. E-mail: p.g.francks@leeds.ac.uk

The purpose of this paper is therefore to outline some of the ways in which Japan's historical experience of rural development might usefully be viewed within a wider comparative context. The method adopted is not that of strict comparison with one or more other countries, but rather that of testing how Japan fits into prevailing theoretical frameworks derived from the study of other historical cases. Long ago, in the 1970s, when surplus labour/dual-economy models dominated development economics, if not economic history, the Japanese case was influentially used in this way. Since then, however, such approaches to Japan's economic history have gone out of fashion, and Japanese economic historians have proceeded to build up a substantial body of research largely outside the comparative context. This has begun to change with the upsurge in empirical interest in East/West historical comparison of productivity and living standards initiated by Kenneth Pomeranz's book *The Great Divergence* (2000). Nonetheless, this paper will argue that theoretical approaches emerging since the 1970s, especially those related to rural income diversification and what I shall call the multi-functional rural household, can be used to incorporate the Japanese case within a wider comparative framework, thereby expanding our understanding of the ways in which the rural economy can influence and play a part in the process of economic development.

Of course, environmentally and in many other respects, Japan remains very different from the European and other countries that might be used as historical examples of industrialisation. No more than around 14 per cent of the Japanese land area is cultivable and the population has long been sustained only by an intensive form of cultivation based on irrigated rice that has much more in common with agriculture in other parts of Asia than with industrial Europe or North America. Hence, Hayami and Ruttan (1971) used Japan to provide the example of a land-saving path of induced technical change, in comparison with the land-using American path. As will be discussed in more detail below, holding size has remained extremely small, comparatively speaking, with the average Japanese farm household managing no more than about a hectare to this day, while non-agricultural income has become central to the maintenance of rural livelihoods. An irrigation system, the outline construction of which dates back to at least the seventeenth century in many places, continues to channel the water from rivers and reservoirs to make rice cultivation possible, while the village institutions that maintain this system, as well as performing many other functions, survive as vital sources of support for cultivating households. In general, an agricultural landscape more different from that of the standard European or North American model of increasing scale, capital intensity and 'business-like' specialisation is difficult to imagine.

Nonetheless, the Japanese rural economy has been subject to many of the same forces –the spread of the market, the growth of non-agricultural production and em-

ployment, the establishment of modern state and social institutions— as most other industrialising countries, so that although the responses of rural households to those forces may have produced interestingly distinctive outcomes, the application of a comparative framework is by no means impossible. In what follows, therefore, from a starting-point in the first post-war Western attempts to apply general theories to Japan, I seek to present the story of Japanese rural development within the comparative context that has emerged, in development studies and economic history, in the decades since¹.

2. 'SURPLUS LABOUR' AND ITS CRITIQUE

It was really not until the 1970s that the success of Japan's post-World War II 'economic miracle' began to oblige those studying economic development in Europe and North America to recognise the existence of the first non-Western case of modern industrialisation. 'The Japanese model' began to be promoted to the developing world of the time and economic historians turned their attention to the pre-war conditions that might have shaped it. In those days, the Lewisian surplus labour approach still held sway and Japan came to be used as a central case within dual-economy models derived from it. Hence, it was argued, up to the 'turning point' (there was considerable debate about exactly when this was), agriculture's role in Japanese growth was simply to give up its low-productivity labour, and to some extent other resources, to the modern industrial sector which acted as the driving force behind economic growth, on the basis of its imported technology and economic organisation (see, for example, Fei and Ranis, 1964). Japan was thus viewed as an archetypal dual economy, with a modern industrial sector organised along Western-style lines, and a traditional sector, dominated by small-scale agriculture, sustaining a reservoir of surplus labour.

This fitted in well with the way in which both Japanese and non-Japanese historians in general wanted to interpret Japanese history, from the vantage point of the post-war period and the emerging economic miracle. A poor and over-populated pre-war rural world of tiny holdings struggling to support too many workers – for some, the breeding ground of support for fascism and imperialism; for others, in the long tradition of Marxist scholarship in Japan, a classic example of landlord/tenant class division and conflict – eventually transformed by the growth of the modern industrial sector and the institutional reforms, such as the post-war Land Reform, that defeat and occupation brought about. This picture of a low-productivity, low-income, oppressed and passive ru-

1. For a discussion of the issues involved in the comparative study of agriculture and economic development that has informed the approach used here, see LAINS AND PINILLA (2009).

ral sector, acting simply as a reservoir of resources (especially labour) to be transferred and utilised in the growth of the high-productivity modern sector, still underlies text-book accounts of Japan's history and even some quite recent academic analysis of agriculture's part in Japan's industrialisation (for example, Hayashi and Prescott, 2008).

However, this picture in fact began to come in for criticism almost as soon as it was first promulgated². It proved difficult to demonstrate that agricultural labour really had had such low and static marginal productivity on the eve of industrialisation. There was a good deal of evidence that industrial employers did not find it so easy to recruit workers from amongst the supposedly unlimited supplies of surplus rural people and that some of Japan's apparently distinctive industrial employment practices were in fact a response to this. A heated debate arose concerning yields and the level of agricultural output that was being achieved in the mid-to-late nineteenth century – hence about labour productivity and subsequent agricultural growth rates. This was never really resolved, though it did lead to an upward revision of the output figures for the late nineteenth century that the dual-economy modellers had used³. Nonetheless, it caused renewed interest in how agricultural production was actually carried out in pre-industrial and industrialising Japan – in technology, irrigation, labour utilisation and the household, and so on – and how this inter-related with non-agricultural activities.

This process coincided with changes in approaches to the rural economy and the farm household outside Japan that reflected the Green Revolution and the growing recognition of agriculture and agriculturalists as central to the whole process of economic development, both historically and in the contemporary Third World. The role of the rural sector came to be seen to involve much more than just the release of labour to the modern sector, and understanding how technical change and output growth might take place in agriculture, or how rural households allocated their labour, began to seem more important than the macro modelling of inter-sectoral resource flows. The positive growth of agricultural output and productivity came to be seen as an essential element in the development process, from the points of view of both understanding industrialisation in the past and improving living standards in the present.

Meanwhile, for historians of Europe, the 'discovery' of proto-industrialisation, or at least of the networks of manufacturing that preceded industrialisation, also encouraged

2. For an outline of the arguments involved, together with more detailed sources, see FRANCKS (1992: 114-23).

3. These are to be found in Volume 9 of the series *Chōki Keizai Tōkei/Long-Term Economic Statistics of Japan* (UMEMURA et al., 1966), which now constitutes the standard source of aggregate data on the agricultural sector.

research into the non-agricultural activities of rural workers. The clear linkages which could be analysed between agricultural and non-agricultural activities within rural households, villages and regions began to undermine the idea that agriculture and industry can be treated as separate, specialised sectors of the economy as it develops, and to focus attention on the interactions between agriculture and manufacturing/services within the rural economy. This also involved looking at the 'traditional' institutions of the rural sector in a new light, less as the 'backward' structures of a peasant world that had to be superseded by 'modern' forms of large-scale organisation and more as the means to the adoption and development of appropriate technology and effective forms of labour utilisation, in the interests of livelihood security.

Work on Japan's economic history has in many ways run parallel with this shifting path of thinking about agriculture's role in development, but intersections between the two have become increasingly rare. In what follows, therefore, I shall try to suggest ways in which the Japanese case can be related to these changing approaches to the history of the rural economy, thereby both reinforcing and enhancing understanding of the role of the rural sector in economic growth and industrialisation.

3. PRE-INDUSTRIAL GROWTH, PROTO-INDUSTRIALISATION AND THE INDUSTRIOUS REVOLUTION

The traditional picture of pre-industrial or early modern Japan was of a static feudal society, presided over by Shoguns of the Tokugawa family and a ruling class of samurai administrators and cut off from external forces for economic change and growth⁴. This picture has long since had to be modified, in the face of evidence of significant expansion in both agricultural and manufacturing output, in conjunction with the spread of the commercial market economy, and a reassessment of Tokugawa Japan's place in wider Asian economic networks. It is now clear that, through the seventeenth and eighteenth centuries, Japan came to possess not only some of the world's biggest and most sophisticated cities,

4. During the Tokugawa period (1600-1868), generally viewed as Japan's early-modern era, the country was divided into domains each governed, with considerable autonomy, by a hereditary feudal lord. Lords gave allegiance to the greatest of their number, the head of the Tokugawa family ruling under the title of Shogun, who provided such national-level government as there was, including the enforcement of severe restrictions on trade and other contact with the outside world. Lords and Shogun were each assisted by their own bureaucracies of salaried officials from the samurai (once warrior) class, funded by the taxation, mostly in the form of a prescribed but in practice negotiable share of each village's rice crop, that they were able to levy on the rural households who managed cultivation of land within the domain.

but also significant areas of high-yielding, commercial agriculture and widespread manufacturing networks producing a broad range of differentiated products –processed food products, textiles, ceramic and metal household goods and so on– to supply the large urban and growing rural market for commercial goods⁵.

Attempts to quantify these changes and to analyse their sources are of course fraught with difficulty at anything other than the level of the local case-study. However, in response to the debate over comparative pre-modern living standards sparked by Pomeranz’s *Great Divergence*, Osamu Saitō has been pioneering ways of comparing wages, labour productivity and living standards between Japan and Western Europe, as well as China. On the basis of the admittedly fragmentary data summarised in Table 1, he concludes that, by the second half of the Tokugawa period, overall output was growing slowly but steadily and this, when combined with relatively little population growth, produced generally rising living standards. As a result, it seems likely that incomes and living standards in pre-industrial Japan were not significantly below those of much of rural Europe at comparable times⁶. This confirms earlier non-quantitative work by Susan Hanley (1997) which concluded that, although in terms of housing, dietary patterns, forms of clothing and household furnishings and much else, Japan differed enormously from early-modern Europe, levels of material well-being may well have been higher than those of European workers at comparable stages of development.

TABLE 1
Saitō’s estimates of growth in real wages and per capita output in Japan, 1700-1870

	Index of real wages	Per capita output	
	1700 = 100	Farm output* kg.	GDP 1990 \$
1700	100	169	570
1870	118	201	737
1700-1870 % p.a.	0.1	0.1	0.15

* originally calculated as rice equivalents

Source: adapted from SAITŌ (2008: 129) and SAITŌ (2005: 47); the estimates of GDP are taken from MADDISON (2001: 255, 264).

5. An English translation of the major collection of Japanese research on which this picture is based is now available as HAYAMI, SAITŌ and TOBY (2004).

6. Saitō’s important recent work on this (SAITŌ, 2008) is not available in English but some of the ideas and data from it appeared earlier as SAITŌ (2005).

What is most significant about these conclusions from the comparative point of view, however, is that the output growth and spread of the market that sustained living standards took place within what remained a predominantly rural, agriculture-based economy. The goods that met growing urban and rural demand were typically produced and marketed within networks of rural producers and traders, making use of labour and skills that remained based in households also practising agriculture. On the one hand, farm households were developing methods to raise the yields of the rice they needed to pay as tax to their feudal masters, while freeing up land and labour for the cultivation of a diversifying range of commercial crops; on the other, they were increasingly finding themselves able to apply any spare labour time they could generate to non-agricultural income-earning activities, on the farm or in temporary wage work away from home.

This is reflected both in the growth in output of commercial crops, such as cotton, mulberry for silkworms, tobacco, fruit and vegetables, and in evidence of the growing significance of by-employment, and the income derived from it, for farm households. The best available data on this comes from the domain of Chōshū where it can be shown that, by the 1840s, income from non-agricultural sources ranged from 20-30 per cent of total household income in the most agricultural areas to over 70 per cent in the least (Smith, 1988: 82)⁷. However, there is evidence of farm-family by-employment throughout the country and the administrations of the feudal domains, far from resisting the diversification of rural household income, could be active in encouraging the manufacturing and agricultural initiatives that might enable farmers to meet their tax obligations more securely (Roberts, 1998). Meanwhile, the merchants who traded and profited from rural output represented a fertile source of loans and subventions, even if they operated outside the formal class system on which Tokugawa rule was based.

As Saitō has argued, proto-industrialisation in its Japanese form, while bearing clear similarities to its European counterpart, also differed in significant ways from the original model of the process as set out by Mendels (Saitō, 1985). It did not lead to population growth or to regional agricultural or manufacturing specialisation and it remained firmly rooted in the rural household that combined both agricultural and non-agricultural activities. Well before Jan de Vries adopted the term ‘industrious revolution’ to describe the consumption-led intensification of work and commercialisation that he observed in northern-European rural households, Akira Hayami had used it to refer to the

7. Chōshū was located at the south-western tip of the Japanese mainland (Honshū) and was a more-or-less average domain from the point of view of the level of agricultural productivity and commercialisation.

quite different supply-side process whereby, in land-scarce but labour-abundant Japan, households had devised the means to increase their overall output through more intensive and effective use of their labour forces⁸.

Out of the work of scholars such as Hayami and Saitō, there thus emerges a pattern of pre-industrial growth and development based, not on regional and household specialisation and emerging wage labour, but on multi-functional rural households utilising the land and labour available to them as effectively as possible in the effort to secure and expand their incomes⁹. For Saitō, this is ‘Smithian growth’, as observed in, for example, pre-industrial Britain and also, following Pomeranz, the Yangzi delta in China, but of a particular Japanese form. This pattern was not undermined by the forced opening of the country to economic contact with the West in the middle of the nineteenth century, or by the subsequent overthrow of the Tokugawa system and adoption of a modern industrialisation strategy, and its implications for the long-term growth of the Japanese economy and the role of the rural/‘traditional’ sector within it cannot be ignored¹⁰. Its institutional basis in the rural household and the ways in which this conditioned intersectoral (agriculture-industry) relations and the developing labour market are the subject of the next section.

4. THE MULTI-FUNCTIONAL HOUSEHOLD AND THE RURAL ECONOMY

Japanese agriculture has remained to this day organised on the basis of the residential grouping of the household. It is thought that, before the establishment of the Tokugawa

8. Hayami’s work is also not easily accessible in English but is summarised in SUGIHARA (2003). For the most recent and detailed account of de Vries’ s model, which, although different from Hayami’s, is nonetheless relevant to Japan in many ways, see DE VRIES (2008).

9. Consequently, wage rates are not necessarily the best indicators to use when comparing incomes and living standards across varying pre-industrial societies. It is Saitō’s efforts to compare income from all sources for households across the Eurasian divide that lead him to suggest that pre-industrial living standards in Japan, while not at the levels achieved in the most advanced regions of North-Western Europe, were comparable with those of rural areas throughout the continent. This is also, he argues, in part a reflection of the fact that the distribution of income between the ruling class and the mass of ordinary households was probably more equal in Japan, as a result of the ability of rural households to generate income from diversified sources (not just wages) (SAITŌ 2008: 123-52).

10. The Tokugawa Shogunate was overthrown in a series of military engagements in 1867-8 and replaced, in a process known as the Meiji Restoration, by a coalition of leaders from the victorious domains, governing in the name of the Emperor Meiji. This group proceeded to abolish the previous system of government, along with the feudal domains and the samurai class, and to institute modernising reforms to society, the political system and the economy. These included the promotion of modern industry and the removal of ‘feudal’ restrictions on economic activity.

regime in the early seventeenth century, larger-scale, extended-family or clan-based cultivation units had prevailed. Thereafter, however, with the removal of the samurai warrior class from the countryside into the towns, under the system of government used by most domains after 1600, and the spread of commercial production for the growing urban market, such holdings increasingly came to be broken up into smaller-scale, household-based units. Ever since, farm management has been carried out by households and although wage labour was not uncommon, within and outside agriculture, pure wage-labourer households have always been rare¹¹.

Tokugawa-period villages therefore typically (with regional variations) came to contain two or three significant ‘main households’, often descended from those that had originally established the village and its cultivable land, who provided the village leaders required to deal with the tax-gathering samurai officials of the feudal lord. Below them was the mass of ordinary households, typically cultivating no more than a hectare of land on the basis of their household labour forces. Wherever possible –i.e. where there were sufficient assets and cultivation rights to pass on– such households organised themselves within the traditional Japanese household form, known as the *ie*, with a patriarchal head duty-bound to hand on the continuing household and its assets to his successor, ideally his eldest son. Younger sons and daughters were expected to move out of the household in due course, to establish their own branch units if there was land to spare for them, to marry or to find employment elsewhere. The household was a residential, rather than kin-based, unit and it was possible to adopt in a successor where necessary to ensure continuity. Villages were (and still are) composed of households with rights to cultivate their portions of village land and to participate in irrigation systems and, except in cases of, for example, famine (increasingly rare over time), the number of households changed little. Once national-level statistical data began to be collected, after the overthrow of the Tokugawa system, they reveal that, even as modern urbanisation and industrialisation became established over the period up to World War II, the number of farm households in Japan remained more-or-less constant.

What this can be shown to demonstrate is the effectiveness of the small-scale, household-based unit as a form of economic organisation under the conditions that prevailed in commercialising and eventually industrialising Japan. As the pioneering work of T.C. Smith (1959) showed, the driving force behind the break-up of larger-scale cultivating and residential units was rising labour productivity and the increased demand for labour which made it difficult to retain and manage the labour forces of household servants and re-

11. Commercial businesses were also organised along household lines during the Tokugawa period and often, in the small-scale sector at least, ever since.

tainers on which larger-scale farm management had been based. 'Main households' therefore increasingly came to hive off parts of their holdings to 'branch households' better able both to make effective use of improved agricultural techniques and to take advantage of the other income-earning opportunities that the spread of the market was coming to generate.

This reflects, first of all, from the point of view of agriculture, the characteristics of the package of improved inputs and techniques that underlay the ability to increase crop output. Although pre-industrial population growth was not rapid and by the second half of the Tokugawa period at least, population control was almost certainly being practised, under Japanese conditions of factor supply, labour was always going to be abundant relative to cultivable land. As the market developed and demand in the cities and castle-towns grew, yield-increasing and if necessary labour-using technical changes were therefore central to agriculture's response. In part, these focused on the cultivation of irrigated rice, which rural households were obliged to grow to meet the tax demands in kind of the feudal administration, but which could also be marketed as the more-or-less luxury grain desired by urban consumers (rural people typically grew and ate other, less highly-prized, grains on a day-to-day basis). The development and diffusion, through the later Tokugawa period and into the second half of the nineteenth century, of higher-yielding rice varieties and of the labour-intensive cultivation and irrigation practices that sustained them is now well established¹². As a result of them, by the second half of the nineteenth century, average rice yields in Japan had reached levels not achieved in much of the rest of East Asia until at least the 1950s (Hayami and Yamada, 1969: 108).

However, what more recent research has also come to demonstrate is the fact that this technical change was designed, not just to increase rice yields, but also to facilitate diversification into a widening range of other crops and activities. The spread of the package of higher-yielding rice cultivation techniques was correlated with investment in improvements to irrigation facilities that enabled paddy fields to be flooded and drained as required, making a second crop possible on a growing proportion of the cultivable area suitable for rice (about half the total). Here, and on the remaining unirrigated land, households with access to market networks were coming to cultivate a widening range of commercial crops – cotton, tobacco, indigo, mat-rush, etc. – alongside grains, pulses, fruit and vegetables for their own use, as long as the labour requirements of different crops could be made compatible. This process is summarised in Table 2, which shows that overall, as the package of intensive cultivation techniques developed and spread though the

12. For a basic description, see FRANCKS (1992: 124-40).

later nineteenth century and into the twentieth, total yields rose, but so also did output per worker, though labour input, in terms of hours worked per year, almost certainly increased as well.

TABLE 2
Rates of growth in agricultural output, inputs and productivity, 1880-1935 (annual average rates in %; 1934-6 prices)

	1880-1900	1900-20	1920-35
total agricultural output	1.6	2.0	0.9
rice output	0.9	1.7	0.4
other crop output	2.0	1.4	0.7
livestock output	6.8	3.8	5.6
sericultural output	3.9	4.7	1.7
commercial fertiliser input	1.6	7.7	3.4
output per worker	1.8	2.1	1.1
output per work-hour	0.6	1.5	1.6
output per hectare of cultivated land	0.7	1.5	1.1

Source: based on data from Umemura et al (1966), as presented in Hayami and Yamada (1991: 19, 26, 37, 39).

Meanwhile, as the towns and cities grew and the market spread, rural households were faced not only with growing demand for commercial crops but also expanding opportunities for employment in processing, manufacturing and services. Given the intensive demand for labour time in the cultivation of rice and other crops, at some points in the year at least, the exploitation of these opportunities had to be compatible with the worker's contribution to the household's agricultural production¹³. Seasonal employment off the farm – in agriculture elsewhere, in construction or service work in the cities, in fishing, in seasonal forms of food-processing such as sake-brewing, and so on – became increasingly widespread, but more significant was the growth in non-agricultural employment taking place in the countryside and utilising the labour time of workers resident in agricultural households. By the second half of the Tokugawa period, the growth in manufacturing activity was largely taking place away from the cities, with merchant-organisers setting up

13. Most domains also formally forbade labour movement away from the village in which the household was registered, in the interests of maintaining the rice-cultivating capacity of their territory. However, it is clear that significant numbers of workers did find more-or-less temporary forms of employment away from their home villages and that domains turned a blind eye, as long as the tax-paying household continued to cultivate its land in the village. After the Meiji Restoration in 1868, workers were legally free to move wherever they wished, although social and familial constraints, especially on eldest sons, remained.

rural production and marketing networks to supply the expanding demand – increasingly by now among the better-off in the countryside as well as the town – for textiles, ceramics, processed food products and much more.

This by-employment took a variety of forms. As elsewhere in the world, much textile production was carried out under types of putting-out system that made use of the time and skills of women and girls based in farming households. Cotton was processed, dyed and woven in a wide range of locally-branded colours and patterns, within networks of village-based workers; the expansion of silk production –in response to export demand after the opening to trade with the West in the mid-nineteenth century, as well as for the domestic market– was the result of the labour of rural women, rearing the silk-worms and preparing the cocoons for reeling and weaving in local workshops and eventually factories. However, many other forms of manufacturing and service production came to make use of the labour time of workers who lived in and contributed their earnings to cultivating farm households.

The path of technical and economic change that emerged in rural Japan during the Tokugawa period, and continued to condition rural economic development through to World War II and even beyond, thus depended on the year-round co-ordination of labour time in both higher-yielding and more diversified forms of cultivation and in non-agricultural by-employment. This required the adoption of a range of techniques and skills to which the small-scale farm household proved better adapted than the large, with the result that the production of both agricultural and non-agricultural goods expanded on the basis of the multi-functional, ‘pluriactive’ rural unit, flexibly making the maximum use it could of the labour resources available to it, as the means to securing and increasing its income. The emergence of this path has many implications for our understanding of the nature of the rural economy and its role in Japan’s development, in a comparative context, and it is to some of these that we can now turn.

5. MARKETS, INSTITUTIONS AND THE MULTI-FUNCTIONAL RURAL HOUSEHOLD

The significance of the diversified, labour- and skill-intensive path of technical and economic change that was being defined in rural Japan from the Tokugawa period onwards can be observed in what we know of the pattern of structural change in agriculture and the rural economy. As we have seen, larger-scale cultivating units utilising extended labour forces were being broken up from the early Tokugawa period and by the nineteenth century, few households managed the cultivation of more than 2-3 hectares of land. By

the Meiji period (1868-1912), the upper level of village society was typically composed of so-called ‘cultivating landlord’ households. These combined cultivation of as much of their land-holding as their household labour forces, supplemented by temporarily hired-in workers if necessary, could manage with renting out the rest of their land and engaging in money-lending, local industry and finance, trading in local products and so on. Members of such households, increasingly literate and well-travelled in the wider world, have long been recognised as bringing both political leadership and technical and economic investment and innovation to their villages, acting as channels whereby improved agricultural technology, for instance, was diffused into the villages (Waswo, 1977)¹⁴.

Nonetheless, it is clear that, given the pattern of technical and economic change in agriculture and rural manufacturing, over time the economic centre of gravity within the village was shifting towards the class of small-to-medium-scale cultivating households, managing around a hectare on the basis of household labour and able to take advantage of the whole range of income-earning activities available as proto- and eventually real industrialisation took place. Once national-level data on the scale of cultivation become available from 1908 (see Table 3), it is clear that gradually the cultivating-landlord class was shifting its interests and investments away from agriculture and the rural economy, while those with only very small holdings were either succeeding in acquiring access to more land or moving more-or-less full-time into non-agricultural work. This process left the village dominated by small-to-medium-scale cultivating households who were beginning, by the inter-war period, to provide political and economic leadership and to determine the direction of technical and organisational change in agriculture¹⁵. Many also benefited from sources of non-agricultural income, as their daughters engaged in textile work and their younger sons found (increasingly not so temporary) wage work locally or further afield.

However, the failure of the rural economy to follow the prescribed path towards larger-scale cultivation, wage labour, and specialist agriculture did not imply stagnation in the countryside. Agricultural output continued to grow steadily, meeting almost all of Japan’s food needs, as well as demand for many manufacturing inputs, such as silk cocoons, until the inter-war period. At the same time, the growing demand for non-agricultural labour was met, even if not in the conventional form of more-or-less ‘surplus’ workers moving from agriculture to industry. Yield-increasing, labour-using techniques continued to be developed and diffused in agriculture, though increasingly also in forms that sought to

14. PARTNER (2009) gives an account of the life of such a landowner, based on his diaries.

15. For a summary of Japanese research on this, see FRANCKS (2006: 231-236).

ease the bottlenecks that prevented members of rural households from taking maximum advantage of non-agricultural employment opportunities¹⁶. Hence, mechanisation, when it eventually began to emerge in the inter-war period, was embodied in small-scale equipment that eased pressure on the household labour force at particular peak times – irrigation pumps, threshers, hullers – rather than substituted for them in the long-term business of field operations¹⁷. The outlines of the technology that enabled almost all post-war rural households to practise ‘part-time farming’ were clearly being laid down much earlier.

TABLE 3
The distribution of arable land by ownership status and scale of cultivation, 1908-1940 (%)

	proportion of cultivated area tenanted	cultivating households by ownership status			households by scale of cultivation in hectares					
		owner	owner/tenant	tenant	-0.5	0.5-1.0	1.0-2.0	2.0-3.0	3.0-5.0	5.0-
1908	45.4	33.3	39.1	27.6	37.3	32.6	19.5	6.4	3.0	1.2
1912	45.4	32.5	40.0	27.5	37.2	33.2	19.6	6.0	2.8	1.2
1917	46.2	31.0	40.9	28.1	36.1	33.4	20.4	6.1	2.7	1.3
1922	46.4	30.6	41.1	28.3	35.1	33.5	21.3	5.9	2.7	1.5
1927	46.1	30.7	42.1	27.2	34.7	34.2	21.6	5.8	2.4	1.3
1932	47.5	30.5	42.7	26.8	34.0	34.3	22.2	5.8	2.3	1.4
1937	46.8	30.5	42.3	27.2	33.4	34.3	22.8	5.7	2.3	1.4
1940	45.9	30.5	42.4	27.1	33.4	32.8	24.5	5.7	2.2	1.4

Source: official survey data collected in Kayō (1958: 94, 135).

At the same time, the persistence of the small-scale, multi-functional farm household does not appear to have inhibited the spread of market relations into the rural economy, only to have prescribed different forms for them¹⁸. It is true that a market in the ownership of agricultural land as such has never developed in Japan: in the Tokugawa period, it was legally impossible to transfer ownership of land between households and even when

16. As Table 2 showed, by the inter-war period, while growth in output per work-hour in agriculture continued to accelerate with increasing use of fertiliser and equipment, that in agricultural output per worker slowed down, suggesting the expanding scope for workers still classed as agricultural to devote time to non-agricultural activities.

17. For case-studies, see FRANCKS (1983) and FRANCKS (1996).

18. The following is mainly based on the Japanese research presented in SAKANE (2002) and WATANABE (2002).

legal title to land was issued, under the Meiji Land Tax Reform, little buying or selling appears to have taken place¹⁹. However, even under the Tokugawa system, mechanisms existed for transferring cultivation rights between households within villages: domain administrations were not bothered about who cultivated land, as long as it was cultivated, and the main concern of villages appears to have been to ensure that village land remained available to village members and did not come under the control of outsiders. Leasing of land between households was widely practised even before 1868, so that, when title to cultivated land was subsequently issued, approximately 30 per cent of the area was deemed to be owned by someone other than the cultivator. Despite the absence of a land market, therefore, the structure of cultivated holdings could shift, in response to technological and economic change as well as the land/labour balance of individual households, by means of forms of tenancy that enabled households to adjust the holdings they cultivated to their economic and demographic circumstances.

This continued to be the case, even as economic growth and industrialisation accelerated from the late nineteenth century onwards. The proportion of the cultivated area farmed by tenants undoubtedly increased somewhat through to the inter-war period and this was once seen as evidence of ‘bipolarisation’ in the countryside, with poor tenant farmers being driven into ‘semi-proletarianisation’ and class conflict with landlords. However, this interpretation of developments in the pre-war countryside has largely been abandoned and the growth in tenancy is nowadays viewed more as reflecting the process whereby larger landowners gave up cultivation of their land to the small-to-medium-scale households better able to take advantage of technical change in agriculture and economic diversification. Many such households were ‘owner-tenants’, renting in parcels of land from a number of landlords in order to supplement what they owned and make maximum use of their available household labour in agriculture (see Table 3). Most landlords owned and rented out only relatively small areas of land and remained resident and cultivating in their villages, maintaining long-term relationships with their tenants²⁰. These are now seen, from the landlord’s side, as serving to reduce the transaction costs involved in the tenancy arrangement, while, from the tenant’s side, providing a degree of security,

19. The new government instituted a nation-wide cadastral survey designed to establish title to all arable land, as the basis on which to levy a national tax on land, to be paid in cash as a proportion of the assessed value of land owned.

20. Local landowners provided credit, loan of draft animals and so on if necessary and promoted technological and other improvements among their tenants, which also benefited the landlord in terms of the stability and quality of the rents he received. Although rental rates were nominally high, landlords were expected to make adjustments according to the state of the harvest and the market and the full contracted rent was often not paid.

21. SAKANE (2002). Sakane’s institutional-economics approach supersedes longstanding earlier debates over the ‘feudal’ or ‘altruistic’ nature of the patriarchal village landlord. See DORE (1959) or WASWO (1977).

protection and bargaining power²¹. Meanwhile, landlord/tenant conflict, up to the 1930s at least, has been reinterpreted as reflecting the efforts of the rising class of '1-2 hectare owner/tenants' to improve their tenancy conditions (Smethurst, 1986).

If the small-scale rural household was thus able to adjust its land-holding as required, despite the absence of a land market and the persistence of long-term landlord/tenant relationships, so was it also able to take advantage of labour-market opportunities, without abandoning cultivation and adopting wage-labourer status. Forms of employment existed such that household members could utilise whatever time they had available in earning outside income. The most well-known example of such employment involved the contract work of young rural women in textile mills, but many other kinds of work were available in this form. Alternatively, manufacturing work in the home or in small-scale local workshops and factories was also increasingly possible through the second half of the nineteenth century and beyond. While in practice by no means all of those who went off to work on contract away from their rural homes ever returned on a permanent basis – younger sons might establish themselves in urban employment; daughters married and stayed in the cities – rural households remained adept at taking advantage of wage-earning opportunities in the labour market while still maintaining and expanding their income as cultivators²².

At the same time, the ability of the small-scale, multi-functional rural household to survive, and even improve its lot, within a market-based and increasingly industrial economy was also enhanced by the activities of wider, village-based institutions. Through the Tokugawa period, what went on within the village was largely left in the hands of village leaders, provided its taxes – for which it as a whole was responsible – were paid. Intra-village irrigation organisation and much else remained in the hands of communal village bodies and despite the efforts of the Meiji government after 1868 to establish more centralised forms of administration, village self-government continued as a force to be reckoned with. Hence, when it came to dealing with the market economy or the modern state, rural households naturally looked to village institutions for support. Whether for obtaining government funding for irrigation improvements or organising the marketing of produce, the village provided a ready-made institutional basis, and village agricultural co-operatives, linked into a hierarchical national network, have remained the basis of the agricultural sector's disproportionate political influence to this day.

As Japan industrialised, therefore, cultivation was increasingly dominated by rural households that farmed around a hectare of owned or tenanted, irrigated and non-

22. For more detail on female textile employment and rural households, see HUNTER (2003).

irrigated land and relied on their own labour resources. With assistance from village institutions and, as time went by, government extension services, they developed the technology that enabled them to produce more from their land and the mechanisms whereby they could engage with the expanding market for their agricultural output. At the same time, they did not hesitate to take advantage of opportunities to participate in the outside labour market, provided this could be made compatible with the maintenance of their agricultural base. The pursuit of the strategy of small-scale cultivation combined with income diversification was not without its ups and downs – the Great Depression hit Japanese farmers, especially those engaged in silk-cocoon production, hard, as it did their counterparts elsewhere in the world – but it enabled the mass of rural households to increase their incomes and secure their positions, even as they also became engaged with the commercial and industrial economy. In many ways, the post-war Land Reform, carried out under the direction of the Allied Occupation forces, which gave ownership of the majority of tenanted land to its cultivators, simply served to consolidate the position of the multi-functional small-scale household, paving the way for part-time farming and the massive adjustment problems that Japanese agriculture faced by the closing decades of the twentieth century.

6. CONCLUSION: THE MULTI-FUNCTIONAL RURAL HOUSEHOLD AND THE PATH OF DEVELOPMENT

The persistence, through the industrialisation process, of an agricultural sector dominated by small-scale, multi-functional household units has many implications for understanding of Japan's development in its comparative context. When looked at from the point of view of the expansion of the non-agricultural sector, it is clear that it helps to explain a number of the features of Japan's industrial growth and organisation. As Tanimoto's pioneering research on a nineteenth-century textile putting-out master has demonstrated, those seeking to employ rural labour – which was clearly cheaper than full-time urban wage labour but still relatively skilled and reliable – had to adapt their employment methods to the requirements of the farm households supplying it, for example paying the highest piece rates, not when demand for the cloth was greatest, but when the competing demands of agricultural work were most intense²³. Such adaptations made possible the survival and development of a whole range of small-scale local industries relying on

23. TANIMOTO (1998: 304-7). Tanimoto has used this research in various English-language publications, including most recently TANIMOTO (2006). The existence and significance of similar kinds of interaction within labour markets in industrialising Europe has been demonstrated by Sokoloff and DOLLAR (1997) and POSTEL-VINAY (1994).

workers still based in farming households. These are often collectively labelled the ‘traditional’ sector but many were in fact able to develop technologically –for example, through application of the electric motor– and by no means all produced ‘traditional’ products: many of Japan’s early manufactured exports, or the parts for them, were made in such small-scale workshops or by means of home-work (Takeuchi, 1991). Moreover, ‘traditional’ industries based in rural areas, such as sake-brewing or the production of Japanese-style textiles, remained crucial for the supply of goods to meet growing domestic consumer demand.

The emergence of Japan’s ‘dual economy’, composed of, on the one hand, a ‘modern’, high-wage industrial sector employing imported forms of organisation and technology and, on the other, a ‘traditional’ sector made up of a mass of small-scale, low-wage producers in agriculture and manufacturing, can thus be seen as inextricably bound up with the strategies adopted by rural households in the face of the growth of the market. The re-evaluation of the ‘traditional’ sector and its role in industrialisation also therefore implies a rethinking of the meaning of the multi-functional rural household and its activities. Japan’s small-scale businesses, operating within networks of producers in their own industrial districts, can be seen as providing clear examples of ‘alternatives to mass production’, producing locally differentiated and branded products and parts which found their niches within the overall structure of output. In many cases, rural households supplied the labour and skills, and often the entrepreneurship, which made such businesses possible, and their organisational forms reflected the structures of labour use in the rural economy into which they had to fit. Underlying the post-war economic miracle, David Friedman (1988) has argued, were thousands of small businesses like the ones he observed, utilising the most modern equipment in workshops attached to rural houses and employing workers who belonged to households that still engaged in agriculture. Rural non-agricultural activities thus appear, not as ‘side-lines’ pursued only because agricultural incomes were inadequate, but as integral and often dynamic elements in households’ livelihoods and in the wider growth of the economy²⁴.

At the same time, it was not just small businesses whose structures and practices were influenced by the world of the multi-functional rural household. The difficulties experienced by modern textile producers in recruiting and retaining female workers led them to offer contracts to employ girls from villages increasingly distant from their mills, and necessitated the provision of dormitory accommodation and facilities for the care and education of workers in ways that have influenced approaches to the employment of

24. Northern Italy provides significant examples of similar historical processes. See BULL AND CORNER (1993) or, for a comparison with Japan, FRANCK (1995).

women ever since (Macnaughtan, 2005). Meanwhile, Andrew Gordon (1985) has argued that even modern heavy-industrial employers found it initially difficult to retain workers used to travelling about from one short-term job to another with a view to one day setting up their own household business. Hence, practices such as ‘life-time employment’ and ‘age-related wages’ emerged as the means to induce male workers to stay and develop skills within the company. Far from being simple reservoirs of surplus labour, rural households, and the methods they devised for diversifying their income sources while continuing to practise intensive agriculture, can be seen as actively conditioning the path of industrial growth in Japan.

The distinctiveness of the Japanese (or possibly East Asian) path of industrialisation, when compared with the classic cases of the industrial revolution, is nowadays of central concern within the literature coming out of the Great Divergence debate. The Japanese/East Asian path is seen as demonstrating that modern industrialisation can be achieved on the basis of market-based institutions and technological developments that differ in significant respects from those that prevailed in the heartlands of the industrial revolution in Northern Europe and North America. This path involves scope for the development of small-scale businesses operating within networks of ‘flexible specialisation’ and for the emergence of labour- and skill-intensive technology that contrasts with the large-scale, capital- and resource-intensive forms of mass production towards which the standard model of the industrial revolution leads²⁵.

In the Japanese case, this ‘labour intensive’ path of industrialisation can clearly be seen as originating in the technological, economic and institutional strategies adopted by rural households through the eras of proto- and then real industrialisation from the late eighteenth century onwards. These were designed to enable the household to employ its labour resources more fully and effectively, on and off the farm, raising output per hectare but also output/income per person, by means of increased work time, to be sure, but also of the technology and skills that raised the productivity of that work. The success of rural households, especially up to the World-War I period, in utilising these means to increase output of both agricultural and industrial goods provided the conditions under which modern industry emerged and to which it had to adapt, with consequences that have persisted for the economy as a whole. In Saitō’s terms, the convergence of pre-industrial living standards across Eurasia, resulting from the multi-functionality and ‘industriousness’

25. For analysis of the East Asian/labour-intensive path, see the papers collected in ARRIGHI, HAMASHITA and SELDEN (2003), which includes contributions by Kaoru Sugihara, Kenneth Pomeranz and other major proponents of the approach. Austen and Sugihara, (forthcoming) considers labour-intensive industrialisation within a wider comparative context.

by means of which East Asian rural households overcame the limitations of their resource endowment, was based on a divergence in the economic structures of ‘Smithian’ growth which was to have profound consequences for the long-term path of development and industrialisation.

What the Japanese case can therefore demonstrate is that there is more than one path towards a modern industrial economy and the path taken is strongly conditioned by the nature and responses of the rural economy. As in much of the more recent development studies literature, the passive and ‘traditional’ peasant has been replaced, as a category in economic history, by the active rural household, devising the means to secure and diversify its livelihood in the face of the spread of market relations and the growth of non-agricultural production (see, for example, Vanhaute, 2008). Japan’s successful pre-World War II industrialisation – compared with, for example, China – demonstrates that the persistence of the small-scale, multi-functional, rural household and its practices is by no means incompatible with economic growth and the development of manufacturing industry, and that models other than those based on the experience of North-Western Europe may be needed to explain observed patterns of both agricultural and industrial growth.

It is perhaps finally worth pointing out, however, that the very long-term view permitted by the Japanese case also reveals the immense adjustment problems that this path of development has implied for agriculture, in the world of globalised capitalism that post-industrial Japan was facing by the late twentieth century²⁶. Nonetheless, for most developing countries today, and in comparison with a number of European examples, this would surely be a price well worth paying, in return for the positive role of the agricultural sector and the long-term and relatively equal improvements in rural living standards experienced over the course of Japan’s industrialisation.

ACKNOWLEDGEMENT:

This paper was originally written for presentation at a seminar at the Department of Applied Economics and Economic History at the University of Zaragoza, and I am grateful to Fernando Collantes, Vicente Pinilla and Javier Silvestre for making this possible, and to them and other participants in the seminar for helpful comments and discussion, as well as to the anonymous reviewers and editors of *Historia Agraria*.

26. For a comparative survey on this, see FRANCK, BOESTEL and KIM (1999).

REFERENCES

- ARRIGHI, G. HAMASHITA, T. and SELDEN, M. (eds.) (2003): *The Resurgence of East Asia*, London, Routledge.
- AUSTEN, G. and SUGIHARA, K. (eds.) (forthcoming): *Labour-Intensive Industrialization in Historical Perspective*, Abingdon, Routledge.
- BULL, A. and CORNER, P. (1993): *From Peasant to Entrepreneur*, Oxford, Berg.
- DE VRIES, J. (2008): *The Industrious Revolution: Consumer Behavior and the Household Economy, 1650 to the Present*, Cambridge, Cambridge University Press.
- DORE, R. (1959): 'The Meiji landlord-good or bad?', *Journal of Asian Studies*, 18/3, pp. 43-55.
- FEI, J. and RANIS, G. (1964): *The Development of the Labor Surplus Economy*, Homewood Illinois, Irwin.
- FRANCKS, P. (1983): *Technology and Agricultural Development in Pre-War Japan*, New Haven and London, Yale University Press.
- FRANCKS, P. (1992): *Japanese Economic Development*, London, Routledge.
- FRANCKS, P. (1995): 'From peasant to entrepreneur in Italy and Japan', *Journal of Peasant Studies*, 22/4, pp. 699-709.
- FRANCKS, P. (1996) 'Mechanizing small-scale rice cultivation in an industrializing economy: the development of the power tiller in pre-war Japan', *World Development* 24,4, pp. 781-91.
- FRANCKS, P., BOESTEL, J. and KIM, C.H. (1999): *Agriculture and Economic Development in East Asia*, London, Routledge.
- FRANCKS, P. (2006): *Rural Economic Development in Japan*, Abingdon, Routledge.
- FRIEDMAN, D. (1988): *The Misunderstood Miracle*, Ithaca, Cornell University Press.
- GORDON, A. (1985): *The Evolution of Labour Relations in Japan: Heavy Industry 1853-1955*, Cambridge, Mass., Harvard University Press.
- HANLEY, S. (1997): *Everyday Things in Premodern Japan*, London, University of California Press.
- HAYAMI, A., SAITŌ, O. and TOBY, R. (eds.) (2004): *The Emergence of Economic Society in Japan, 1600-1859*, Oxford, Oxford University Press.
- HAYAMI, Y. and RUTTAN, V. (1971): *Agricultural Development: an International Perspective*, Baltimore, Johns Hopkins Press.
- HAYAMI, Y. and YAMADA, S. (1969): 'Agricultural productivity at the beginning of industrialization' in OHKAWA, K., JOHNSTON, B. and KANEDA, H. (eds.), *Agriculture and Economic Growth: Japan's Experience*, Tokyo, University of Tokyo Press, pp. 109-35.
- HAYAMI, Y. and YAMADA, S. (1991): *The Agricultural Development of Japan: a Century's Perspective*, Tokyo, University of Tokyo Press.

- HAYASHI, F. and PRESCOTT, E. (2008): 'The depressing effect of agricultural institutions on the pre-war Japanese economy', *Journal of Political Economy* 116/4, pp. 573-652.
- HUNTER, J. (2003): *Women and the Labour Market in Japan's Industrialising Economy*, London, Routledge Curzon.
- KAYŌ, N. (1958): *Nihon Nōgyō Kiso Tōkei (Basic Statistics of Japanese Agriculture)*, Tokyo, Nōrinsuisangyō Seisansei Kōjō Kaigi.
- LAINS, P. and PINILLA, V. (2009): 'Introduction' in LAINS, P. and PINILLA, V. (eds.), *Agriculture and Economic Development in Europe since 1870*, London, Routledge, pp. 1-24.
- MACNAUGHTAN, H. (2005): *Women, Work and the Japanese Economic Miracle*, London, Routledge Curzon.
- MADDISON, A. (2001): *The World Economy: A Millennial Perspective*, Paris, Organisation for Economic Cooperation and Development.
- PARTNER, S. (2009): *The Mayor of Aihara*, Berkeley, University of California Press.
- POMERANZ, K. (2000): *The Great Divergence*, Princeton, Princeton University Press.
- POSTEL-VINAY, G. (1994): 'The dis-integration of traditional labour markets in France: from agriculture and industry to agriculture or industry' in GRANTHAM, G. and MACKINNON, M. (eds.), *Labour Market Evolution*, London, Routledge, 64-83.
- ROBERTS, L. (1998): *Mercantilism in a Japanese Domain*, Cambridge, Cambridge University Press.
- SAITŌ, O. (1985): *Purotokōgyōka no Jidai (The Era of Protoindustrialisation)*, Tokyo, Nihon Hyōronsha.
- SAITŌ, O. (2005): 'Pre-modern economic growth revisited: Japan and the West', *London School of Economics/Global Economic History Network Working Paper Series* 16, Department of Economic History, London School of Economics [<http://www.lse.ac.uk/collections/economicHistory/GEHN/GEHNPdf/WorkingPaper16-OS.pdf>].
- SAITŌ, O. (2008): *Hikaku Keizai Hatten Ron (Comparative Economic Development)*, Tokyo, Iwanami Shoten.
- SAKANE, Y. (2002): 'Kindaiteki tochi shoyū no gaiken to tokushitsu' (The outline and characteristics of modern landownership) in WATANABE, T. and GOMI, F. (eds.), *Tochi Shoyū Shi (The History of Landownership)*, Tokyo, Yamakawa Shuppansha, pp. 247-258.
- SMETHURST, R. (1986): *Agricultural Development and Tenancy Disputes in Japan, 1870-1940*, Princeton, Princeton University Press.
- SMITH, T. (1959): *The Agrarian Origins of Modern Japan*, Stanford, Stanford University Press.
- SMITH, T. (1988): 'Farm family by-employments in pre-industrial Japan' in SMITH, T., *Native Sources of Japanese Industrialization*, Berkeley, California University Press, pp. 71-102.

- SOKOLOFF, K. and DOLLAR, D. (1997): 'Agricultural seasonality and the organisation of manufacturing in early industrial economies: the contrast between England and the United States', *Journal of Economic History*, 57, pp. 288-321.
- SUGIHARA, K. (2003): 'The East Asian path of development' in ARRIGHI, G., HAMASHITA, T. and SELDON, M. (eds.), *The Resurgence of East Asia*, London, Routledge, pp. 78-123.
- TAKEUCHI, J. (1991): *The Role of Labour-Intensive Sectors in Japan's Industrialization*, Tokyo, United Nations University Press.
- TANIMOTO, M. (1998): *Nihon ni okeru Zairaiteki Keizai Hatten to Orimonogyō (Indigenous Economic Development and the Textile Industry in Japan)*, Nagoya, Nagoya Daigaku Shuppankai.
- TANIMOTO, M. (2006): 'The role of tradition in Japan's industrialization: another path to industrialization' in TANIMOTO, M. (ed.), *The Role of Tradition in Japan's Industrialization*, Oxford, Oxford University Press, pp. 3-44.
- UMEMURA, M. et al (1966): *Chōki Keizai Tōkei 9: Nōringyō (Long-term Economic Statistics 9: Agriculture and Forestry)*, Tokyo, Tōyō Keizai Shinposha.
- VANHAUTE, E. (2008): 'The end of peasantries? Rethinking the role of peasantries in a world-historical view', *REVIEW XXXI/1*, pp. 39-59. [<http://mpira.ub.uni-muenchen.de/13291/>]
- WASWO, A. (1977): *Japanese Landlords*, Berkeley, University of California Press.
- WATANABE, T. (2002): 'Kinseiteki tochi shoyū no tokushitsu' in WATANABE, T. and GOMI, F. (eds.), *Tochi Shoyū Shi (The History of Landownership)*, Tokyo, Yamakawa Shuppansha, pp. 247-58.