

The modern consumer, the household and the market In Western Europe and Japan

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The behavioral sources of economic growth.

World history as understood by social scientists has long been divided into two parts by a dividing line we have come to know as the Industrial Revolution. This revolution, although it began without much fanfare in an offshore corner of Europe, was soon vested with a universal significance: it separated a “traditional”, pre-industrial world from the “modern”, industrial world.¹ More recently, it has also been pressed into service to launch the “Great Divergence”, sending Europe and China, and presumably many other areas of the world, onto fundamentally different economic trajectories.² Temporal and geographical divisions emerged quite suddenly around 1800 that would shape world history for (at least) two centuries.

It should not surprise us that the explanation for this dramatic and profound break with the past has always remained contested. Technology stands at its core, but institutions, political power, ecology, investment and historical contingency have all been

¹ The literature on the British Industrial Revolution is vast, as is that on the concept of social modernization. I should note here that there is an alternative vision of historical discontinuity – embraced more by historians than social scientists – that focuses on the 15-16th centuries (the age of Renaissance and Reformation, of discoveries, colonization and scientific advances) as the starting point of “modern history” in the West.

² Kenneth Pomeranz, The Great Divergence (Princeton, 2000); R. Bin Wong, China Transformed: Historical Change and the Limits of European Experience (Ithaca, N.Y., 1997); R Bin Wong and Jean Rosenthal, Before and Beyond Convergence (Cambridge, Mass., 2011).

invoked to account for what is usually described as the “lifting of the Malthusian constraints” on economic growth. More recently, arguments have been advanced that shift the ground from concrete factors such as resources, capital and power toward aspects of human behavior. Economists long have tended to avoid arguments about changing behavior, preferring to simplify their models by holding behavioral variables constant. But a recent and influential contribution to this debate builds a model of the Industrial Revolution that is founded on behavioral change. Gregory Clark’s A Farewell to Alms. A Brief Economic History of the World (Princeton, 2007) presents a rigorously Malthusian vision of all of world history up to 1800. He does not mince words about the stagnation of material life and the futility of pre-industrial efforts at human betterment: “The poor of 1800, those who lived by their unskilled labour alone, would have been better off if transferred to a hunter-gather band.”³

Yet, beneath the surface of this cruel world, in which no good deed went unpunished, Clark detected the seeds of progress, which would germinate and sprout in England around 1800 and liberate England’s poor from their material fate. These “seeds” were the offspring of the rich. Well-to-do families had more children and more survivors than the poor, and over the course of many centuries the descendants of the rich (even if they were not rich themselves) populated society with a multitude of people who were peaceable, tractable, prudent and literate and which acted to push to the demographic margins those who were inclined (whether by nurture or nature) to be impulsive, violent, spendthrift and indolent. Clark offers what one might call a supply-

³ Gregory Clark, A Farewell to Alms (Princeton, 2007), p. 2.

side explanation (a demographic supply) of behavioral change that laid the foundations for a higher productivity economy.

My book, The Industrious Revolution, appeared a year later, and also offered an account of behavioral change leading to important economic transformations.⁴ It does not aspire to provide an overarching account of the course of world history as a whole, but it does represent an effort to endogenize an important “demand side” contribution to long-term economic growth by illuminating the conditions under which consumer demand can activate market change via the reorganization of the household economy. This “reorganization” had a dual character, increasing the percentage of household consumption purchased from others as it increases the percentage of household production, including household labor, sold to others via the market. This dual intensification is what I call an “industrious revolution.”

This paper offers a succinct account of the catalysts to changing consumer demand, describes how the economic organization of the household channels consumer aspirations, and investigates how the market and the household interact to realize (or frustrate) such aspirations. While the theoretical framework is general, the historical context in which I have developed it is specific to Western Europe. In the paper’s later sections I extend the model to consider some historical conditions specific to Japan and China.

The Origins of the Modern Producer

⁴ Jan de Vries, The Industrious Revolution. Consumer Behavior and the Household Economy, 1650 to the Present (Cambridge, 2008).

The starting point for nearly all theorizing on pre-modern agrarian economies is the doctrine of diminishing returns. Increased output invariably required even larger increases of inputs, and until industrial society could supply more productive capital embodying new technologies, those inputs were primarily labor. To produce more required increased drudgery: longer and harder labor and, correspondingly, less leisure.⁵ So long as the inducement to labor longer and harder came only from external compulsion – population growth requiring more food; the state, landlords, and/or a priesthood imposing taxes, rents and tithes – one cannot speak of economic growth. Any improvement in economic well-being would be fortuitous and transitory, and to the extent that such a benign environment led to a growth in population (and this is the heart of the Malthusian argument) it would quickly disappear.⁶

The simple form of the Malthusian equilibrium described here supposes that man and land (a population subsisting from direct agricultural production) are the only variables of importance in the pre-industrial world. The addition of elite claimants to a share of total production adds an important complication. “Civilization” in the form of political and religious institutions, urban centers, and physical infrastructure puts additional pressure on the producing population, both by claiming a portion of the output and – to the extent the elites provide security and order to the society – by enabling further population growth. Neither of these elite contributions make peasants materially better off, but they do lead to the development of a more disciplined labor force, inured to lengthy, regular work.

⁵ Marshall Sahlins, Stone Age Economics (Chicago, 1972); Jared Diamond, “The Worst Mistake in the History of the Human Race,” Discover (May, 1987), pp. 64-66.

⁶ Clark, Farewell to Alms, pp. 33-35.

Finally, the addition of markets adds a further and even more significant complication to the Malthusian equilibrium. In the basic model, nothing mediates between the supply of land and the population except technology. But when markets are introduced, the possibility of specialization is introduced, as well as the possibility of non-agricultural production.

These extensions to the model led me to the thesis that households could escape from the iron logic of diminishing returns. Under favorable institutional conditions, households could achieve a significant increase in output through a fuller absorption of household labor, often by pursuit of non-agricultural activities, through greater efficiencies of productive labor via specialization, and, critically, through market incentives to labor-intensification. Where the household face sufficiently developed commodity and factor markets and sufficiently efficient transport and distribution services it could exploit the joint powers of specialized production and intensified labor to increase output, even in the absence of an industrial revolution.

This is the “supply side” aspect of the industrious revolution. As applied to Japan, Akira Hayami, who coined the term, Kaoru Sugihara and Osamu Saito variously argue that by substituting labor for capital and by planning both the composition of the household and the deployment of its labor power, a labor force both skilled and industrious formed a key resource for Japan’s post-Tokugawa era development.⁷

⁷ Akira Hayami, “A Great Transformation. Social and Economic Change in sixteenth and Seventeenth Century Japan,” *Bonner Zeitschrift für Japanologie* 8 (1986); Kaoru Sugihara, “The East Asian Path of Economic Development. A Long-Term Perspective,” in Giovanni Arrighi, Takeshi Hamashita, and Amarak Selden, eds., *The Resurgence of East Asia. 500, 150, and 50 Year Perspectives* (London, 2003), pp. 78-123; Osamu Saito, “Work, Leisure and the Concept of Planning in the Japanese Past,” (unpublished, Institute of Economic Research, Hititubashi University, 1996).

In a European context the concept similarly focuses on the peasant household as a complex unit of production, carefully managed to maximize total household output through a mixture of market-oriented agricultural production, industrial by-employments, and direct labor force participation. While the mix of activities varied according to the non-labor assets of the household, the key feature that unites them is industriousness: an increased application of household labor to market-oriented economic activity, the disappearance of the backward bending labor supply curve, and a major downward shift in the relative price of time.

In the European context, the industrious revolution was not only a supply side phenomenon.⁸ Critical to the concept is a simultaneous change in household consumption that increases the role of purchased inputs in ultimately consumed goods and the emergence of new consumption bundles that motivate the striving for money income and economize on preparation and consumption time. In short, the traditional external forces standing behind producers (subsistence and payments to elites) are replaced by an internal motivation to improve wellbeing via the acquisition of market goods. The Scottish classical economist Sir James Steuart expressed this succinctly: in former times “men were... forced to labour because they were slaves to others; men are now forced to labour because they are slaves to their own wants.” His contemporary,

⁸ Craig Muldrew, Food, Energy, and the Creation of Industriousness (Cambridge, 2011) argues, in sympathy with Weber’s well-known “Protestant Ethic” that English industriousness began as a supply-side phenomenon, and found its origins earlier than I had argued: “In fact, the concept of industriousness was created in early seventeenth-century England, when the population was growing faster than the food supply... The concept was actually one developed by puritan polemicists in England in the first half of the seventeenth century... it derived from Protestant theology’s focus on application to one’s calling, or occupation, as a sign of grace. But puritan writers took it a step further in focusing on labour as a means of social improvement involving the increased production of both food and manufactured goods.” Pp. 15-16.

David Hume, described the same transition with more insight into its consequences: production in the old pre-commercial world had been governed by pain and aversion; in the new commercial world it is shaped by pleasure and desire.⁹

The Origins of the Modern Consumer

It is only human to be a consumer. We need to consume in order to survive physiologically (we need food, clothing and shelter) but no less important is social survival. Even the poorest of people need to consume something beyond basic survival, some little item of comfort or pleasure, of distinction or decoration, signifying status or salvation. Rich and poor, we are all consumers, and no less an authority than Adam Smith, in his Wealth of Nations, asserted that “Consumption is the sole end and purpose of all production.”¹⁰ So, if consumption is universal and as old as humankind, when can we say that the “modern consumer” emerges on the historical stage?

Most economists are inclined to regard this as a question badly put. It places the cart before the horse, since the modern consumer emerges when modern production becomes possible. When technology, institutions, trade and empire converged to launch the Industrial Revolution, the resulting new world of goods sets the stage for the consumer. Jean-Baptiste Say’s law – that production creates its own demand – is not the last word on this topic, to be sure, but it may still suffice to indicate the economist’s first instincts when it comes to explaining consumer behavior. As new goods and new

⁹ Sir James Steuart, An Inquiry into the Principles of Political Economy (London, 1767), Book I, Ch. 7, p. 40; David Hume, “On Commerce,” Essays: Moral, Political and Literary ([1752] London, 1989), p. 294.

¹⁰ Adam Smith, An Inquiry in to the Nature and Causes of the Wealth of Nations ([1776] London, 1904), p. 179.

relative prices are presented to the consumer, he reallocates a limited budget among the available choices to maximize his utility. And that is the end of the matter. There is nothing terribly revolutionary about it.

Historians are inclined to take our question more seriously, but are rather undisciplined in their responses. They have claimed to identify transformative eras of “consumer revolution” in periods ranging from the Renaissance to the decades after World War II. Repeatedly, they have written of how Europeans, or a large portion of them, left an Edenic and stable world of traditional consumption and took the fatal and irrevocable steps onto the treadmill of modern materialism and acquisitiveness. One can only lose one’s innocence once, but historians claim to have seen it happen over and over again.¹¹

From the old consumer and the new.

Obviously, any claim about the origins of modern consumption must begin by carefully defining its terms and defending its assumptions. I argue that the essential transition to a modern consumer ethic comes when the universal desires for comfort (reduced pain) and pleasure (stimulation) cease to be understood as in direct conflict with both individual morality and the integrity of state and society. In European culture, both ancient and Christian traditions viewed the pursuit of “luxury” as the enemy of virtue, since nearly all of its expressions tended toward hedonism. Nor could the personal damage done by such pursuits be set against some asserted advantage to the economy as

¹¹ For a review of the literature, see: de Vries, Industrious Revolution, Appendix: Five Consumer Revolutions, pp. 37-39.

a whole, despite Bernard Mandeville's efforts to make this claim.¹² Luxury consumption typically took the form of personal services or costly and exotic imports, and these raised the threat of balance of payments deficits and a resulting "drain of treasure", the great danger against which all mercantilist writers warned.¹³ In sum, conventional wisdom provided no basis for a positive assessment of consumer desires so long as these desires took the familiar forms of physical pleasure, indolent comfort, debauchery and extravagance.

Modern consumption requires a redirection of our search for comfort and pleasure. "Vicious luxury" must be made innocent: that is, transformed into a means of achieving personal refinement and social betterment. This transformation had two significant aspects. It required a new philosophical understanding of the role of consumption; a break with venerable tradition. It also required the creation of a world of new material possibilities. In many respects, theory followed practice in Europe's construction of new patterns of consumer behavior, but we can also observe an interaction between the two. "Consumption capital" is accumulated via exposure to new experiences, but the effects of these exposures often depend on a mental framework that allows their possibilities to be comprehended.

The essential transformation that led from a world of old luxury to new luxury can be understood by starting with David Hume's identification of the basic motivations for all consumption. In "Of Refinement in the Arts" he posits that "human happiness [we

¹² Bernard Mandeville, The Fable of the Bees, or Private Vices, Public Benefits ([1714, 1723, 1733] London, 1934).

¹³ Thomas Mun, England's Treasure by Forraign Trade or the Balance of Our Forraign Trade in the Rule of our Treasure (London, 1664). See also: Walter E. Minchenton, Mercantilism: System or Expediency? (Lexington, Mass., 1969).

might substitute here the economist's term: utility]... consists in three ingredients: action, pleasure, and indolence (or repose)...”¹⁴ More recently, Tibor Scitovsky rephrased this by dividing utility into two parts: the search for comfort and the search for pleasure.”¹⁵ *Comfort* refers to all consumption that reduces pain and discomfort. It includes provision of the necessities of life, but obviously need not stop there; there is a multitude of ways in which one might increase one's physical comfort. *Pleasure* refers to consumption that provides stimulation and arousal. This, too, can take a multitude of forms: some high minded, some – indeed, many -- base. Scitovsky observed that the desire for comfort is satiable, while that for pleasure is not. It is open-ended. Moreover, the more one's search for comfort is satisfied the more important, even pressing, becomes the search for pleasure. It is the only antidote to the boredom brought on by physical comfort, although inevitably a temporary one.

Scitovsky's insights are important, but they seem to explain best the consumer behavior in a society of physical appetites where the search for warmth and sustenance is enlivened, at intervals, by lust and gluttony. The transition to modern consumer behavior involves a further elaboration of consumer aspirations. Besides physical comfort we direct more of our attention to achieving “social comfort”, which takes the form of goods that affirm our respectability, our attainment of higher status, and our good taste. Social comfort is secured by acquisition of “positional goods”, but is undermined by the “conspicuous consumption” of others. Unlike physical comfort, the search for social comfort is endless; indeed, the search provokes counter-actions, insuring its perpetuation and intensification. The search for social comfort is unlike physical comfort in another,

¹⁴ David Hume, “Of Refinement in the Arts,” *Essays*.

¹⁵ Tibor Scitovsky, *The Joyless Economy* (Oxford, 1976; rev. ed., 1992).

more positive, respect: it tends toward social interaction and the cultivation of “other-regarding” behaviors. The reputation of commercial societies for peaceable and orderly life and for the construction of “civil society” rests on this foundation.¹⁶

Besides pursuing hedonistic physical pleasure we direct ever more attention toward the “mental pleasures” that derive, however fleetingly, from novelty, fashion, and the very act of searching for new sources of stimulation. The pleasure secured by searching for novelty and fashion is insatiable (the search is never ending), and it can be pursued by rich and poor (objects of desire can be produced for every purse). Is the pursuit of material novelty, like its older, corporal cousin (luxury), the enemy of virtue? Hume conceded that it could become excessive, and “the source of many ills,” but he regarded its virtues to outweigh these dangers. Consumption directed toward new fashion, novel products, and the like holds the promise of betterment: the actively searching consumer accumulates experience and information that allows the possibilities of new consumption to be recognized. “Innocent luxury” is an essential element of a prosperous, sociable society that allows for individual self-actualization. In addition, it is a spur to industry – the antidote to sloth and idleness – that is far superior to the alternative: compulsion.¹⁷

When and where did the industrious consumer emerge?

It is a considerable simplification of the messy course of history to claim that the old, static, hierarchical and hedonistic form of consumption was wholly replaced by the

¹⁶ Montesquieu was the first to develop a full appreciation of this dimension of the modern consumer and his behavior. See: Albert Hirshman, The Passions and the Interests (Princeton, 1977).

¹⁷ David Hume, “Of refinement in the arts.” Essays.

dynamic, participatory and sociable consumption of modernity. Remnants of archaic consumer practices linger even in our time. But the transition to modern consumer behavior is not simply an academic abstraction: it is an historical process that can be situated in both time and location. I believe that it first occurred on a large social scale in the long eighteenth century in the Atlantic world (Northwestern Europe and Colonial North America). Moreover, it was not simply the inevitable consequence of the Industrial Revolution. Rather, its emergence preceded the rise of the new factories and technologies by a century.

At the heart of this transition was a gradual change in the way families provided for their needs and wants. As expanding trade and more efficient markets made new and better goods available, families revised the work tasks of their members, especially the wives and children, in order to earn more money income. In sum, households became more specialized: *simultaneous*, they increased the percentage of household production sold to others and increased the percentage of household consumption purchased from others. An “industrious revolution” took place as families engaged more fully with the market in order to participate more fully in market-based consumption. An attraction of this reordering is the higher level of productivity made possible by specialization in production. Standing against this attraction is the expense and risk – the high transaction costs – of depending on the market for consumption. It is this cost that stands in the way of such a transformation of the household economy in most societies. The ability of a household to secure the increasing returns from a progressive division of labor depends

on the simultaneous commitments of a multitude of households to also choose this path. Only then can the transaction costs of market-based consumption decline.¹⁸

The industrious revolution was a household-level process, but it depended on the solution of a broader coordination problem. In order for it to succeed numerous households needed to have sufficient confidence in the market to risk their commitment to specialization in production. Widely desired consumer goods provided the signals that made this coordination possible, since they revealed broad engagement in a common enterprise.

My emphasis on the importance of *simultaneity* both within the household, where productive resources are re-deployed as consumption technologies are revised, and among the households of an economy, where market-orientation must be sufficient to support an efficient system of distribution and retailing, leads me to conclude that an industrious revolution required a quite specific social, political, and economic setting – that it could not have emerged in most parts of the world until a late much later date, and in many parts not even now.

We routinely suppose that changes in consumer behavior are a matter for the individual and his or her preferences and income. It is individual utility and its maximization that is at issue. But in the past, and today to a large extent still, consumption decisions took place within the household economy and were channeled and often constrained by its productive and internal redistributive priorities. In addition, the

¹⁸ See Xiaokai Yang and Jeff Borland, “A Microeconomic Mechanism for Economic Growth,” Journal of Political Economy 91 (1991), pp. 460-82.; This “coordination problem” nicely illustrates the point made long ago by Allyn Young: Not only does “the division of labour depend on the extent of the market, but the extent of the market depends on the division of labour.” Allyn Young, “Increasing Returns and Economic Progress,” Economic Journal 38 (1928), pp. 527-42.

capacity of the household economy to alter its production mix and consumer practices depended substantially on its access, and the terms of that access, to commodity and factor markets. In short, consumer behavior is embedded in a complex chain of adjustment that extends from the individual, via the household economy, to the market economy.

The nuclear family structure, precisely because it is “weak”, appears to have provided for the greatest flexibility for reorienting its productive resources toward new consumption goals. The features associated with the “European Marriage Pattern” (late age at marriage, small age differences between husband and wife, wide-spread life-cycle servanthood, among others) add further support to the claim that nuclear households give greater scope to the expression of individual preferences and to negotiation among couples and between parents and children in the creation and internal distribution of household consumption.

The flexibility of such households is also their source of vulnerability. For this reason, there were parts of Europe, especially rural areas, where the nuclear household were buttressed by a range of non-familial, non-market institutions that acted much like extended families and kin networks, to constrain innovation in both production and consumption.¹⁹ These corporate institutions supplied a sort of social ballast. They included craft guilds, merchant guilds, village communities, urban corporations, manorial

¹⁹ The corporate institutions described here were perhaps strongest in small towns. But in larger European cities, especially commercial cities, more encompassing institutions (hospitals, alms houses, orphanages) acted to address the problem of family breakdown that was endemic to nuclear family structures. See Katherine Lynch, Individuals, Families, and Communities in Europe, 1200-1800. the Urban Foundations of Western Society (Cambridge, 2003). On the stifling corporatism of small urban communities, see: Mack Walker, German Home Towns (Ithaca, N.Y., 1971).

systems, religious bodies, and privileged corporate “orders” of society. While at least some of these could be found nearly everywhere in Europe, they were most numerous, forming a true corporate society, in the lands of the Holy Roman Empire, especially in its southern regions. These institutions provided local enforcement for the behavioral controls legislated by state sumptuary laws (regulating dress), food consumption controls (intended to prevent “wasteful” uses of grain), and the proper employment of women (intended to prevent the existence of independent females or of female-headed households).²⁰ They limited the right to engage in a wide range of trades and industries, regulated retailing practices, and added to the costs of inter-regional trade. The existence of corporate institutions can be seen as a substitute for some of the forms of internal self-regulation characteristic of extended families and strong kin networks. Where they were numerous, the behavior patterns associated with the industrious revolution met with significant obstacles.

Finally, it appears that an industrious revolution required access to a well-developed network of urban markets, integrating the regions and providing durable connections to long-distance trade. The industrious revolution itself – by stimulating specialized household production and market dependence – was a catalyst to market development, but the risk of embarking on this path, let alone the information to consider the possibility, required the prior establishment of a durable urban network.²¹

²⁰ Sheilagh Ogilvie, *A Bitter Living* (Oxford, 2003). See also Roman Sandgruber, *Die Anfänge der Konsumgesellschaft* (Vienna, 1982), p. 242.

²¹ For a discussion of European urban networks and their development in the early modern era see: Jan de Vries, *European Urbanization, 1500-1800* (Cambridge, Mass., and London, 1984); Ad van der Woude, Jan de Vries, and Akira Hayami, eds., *Urbanization in History* (Oxford, 1990).

The Industrious Revolution: unique or universal?

Consideration of these factors of household structure, external constraints on household organization, and urban market networks led me, as I wrote The Industrious Revolution, to the tentative conclusion that the new consumer behavior leading to industrious households required quite specific conditions, found most abundantly in northwestern Europe, its North American settler offshoots, and, perhaps a few large urban centers elsewhere in Europe.²² Of course, such a conclusion can only be tentative until many more parts of the world, let alone of Europe, are studied than I had either the time or skills to do myself. Indeed, even before the book appeared, some historians argued that new consumer aspirations and an “intensification” of economic life characterized broad stretches of the eighteenth-century world. Most prominent, and most expansive, is the claim laid out by C. A. Bayly in the introduction to his Birth of the Modern World, 1780-1914. The Industrious Revolution concept, he stated, “can be usefully expanded to track many forms of economic intensification which had been occurring across the world since at least 1650.” Such revolutions were reordering society in locations from “China to Massachusetts,” and in “Amsterdam, Malacca, and Fez. They wanted better-quality food and clothing, more honor and status.”²³

The “Great Divergence” literature also stands as a rebuke to my parochial approach. If living standards in parts of East Asia were comparable to those in Northwestern Europe up to 1800, as Kenneth Pomeranz argues, then “luxury” consumption must have taken on a considerable scope. Without explicitly arguing for a revolution in Chinese consumer behavior, Pomeranz devoted a great deal of attention to

²² de Vries, Industrious Revolution, pp. 18-19.

²³ C. A. Bayly, The Birth of the Modern World, 1780-1814 (Oxford, 2004), p. 6.

the formidable scope of consumer goods such as cotton cloth and tea. More recently, Penelope Francks has argued for a late-Tokugawa shift in the character of consumption (away from status-based consumption – what I call the “old luxury”).²⁴ To the extent that these scholars argue, as Francks does explicitly, that consumerism is not “something that arrives as part and parcel of the imported industrialization that brings modern [Western] goods to domestic [Japanese, other non-western] markets” I am in full agreement.²⁵ I restricted the geographical scope of the industrious revolution not because of the nature of the desired consumer goods but because of the behavior of households in securing new goods.

Another challenge to the assumptions underlying the geographical restrictions I put on the industrious consumer comes from those who question the economic inflexibility that I ascribed to extended family structures and strong kin networks. In my view, when all other factors are held constant, extended families make less use of markets than nuclear families, and this is particularly true of involvement in formal labor markets. Moreover, even if there were no difference in the market engagement of these two household types in their role as producers, “complex family structures greatly limit and complicate decisions about consumption. There are numerous claimants to available resources, both within the household and in larger kin networks. Such complex households are ‘strong’ in the sense that they have a greater self-insurance capacity than nuclear households. But this capacity to absorb risk comes at a price: more rigid rules and conventions governing the allocation of economic resources [and the distribution,

²⁴ Pomeranz, The Great Divergence; Penelope Francks, The Japanese Consumer: An Alternative Economic History of Modern Japan (Cambridge, 2009).

²⁵ Francks, p. 7.

within the household, of consumption]. In addition, many married men and women in complex household structures are not in charge of their households, deferring for many years, if not forever, to the decisions of more senior figures.”²⁶ All of this, I reasoned, must act to restrict and inhibit new consumer behavior and complicate the task of incentivizing household labor to achieve new consumer goals.

But such reasoning is rejected by a recent study of Chinese economic performance during the Qing period. Jean-Laurent Rosenthal and R. Bin Wong, in Before and Beyond Convergence, concede that “nuclear families structure economic activities around markets more than do extended families,” but they insist that this is only a matter of degree, and that the trends toward or away from market involvement, will be similar to all household structures.²⁷ They hold this position for theoretical reasons. Just as Ronald Coase’s celebrated theory of the firm demonstrated that business firms should select market negotiations or internalized economic activity according to the relative transaction costs of these alternatives, so Rosenthal and Bin Wong reason by extension that households, as economic units, must do the same.²⁸ If they are observed to internalize economic activities, this must be the optimal among available choices. Of course, the available choices are constrained by family structure itself, since this cannot be altered in the short run, as Coase assumed firm structure was subject to alternation by decision of its managers. But Rosenthal and Bin Wong wish to stress the broad scope larger families have in allocating their productive factors without recourse to markets. In their view a household economy that acted without need of markets possessed a

²⁶ De Vries, Industrious Revolution, pp. 17-18.

²⁷ Rosenthal and Bin Wong, Before and Beyond Convergence, p. 36.

²⁸ Ronald Coase, “The Nature of the Firm,” Economica 16 (1937), pp. 386-405.

considerable advantage. The inefficiencies resulting from its size and inflexibility were more than compensated for, they argue, by the avoidance of the costs and risks of state institutions (laws and courts) and by the internal capacity to direct resources to the most capable household members and to expel to the market sector the least productive household members. This intriguing claim depends very much on the premise that extended household economies are governed by a single, well-informed head who is unfettered in his ability to coordinate and discipline the labor of all subordinate members. My claim that the complex household tends to be inflexible -- precisely because the limited capacity of its head to take major initiatives -- contradicts their claim. It is, of course, possible that extended households are not everywhere the same, and that disciplined, strategizing peasant households happened to be characteristic of East Asia.²⁹

Even if the managerial acumen and hierarchical discipline of extended households were conceded, a second problem remains: what is this household trying to optimize? Is there scope in this model for modern consumer aspirations, or are these subordinated to other objectives defined and enforced by the household head?³⁰ Thus, even if such a household attained a per capita income equal to a more market-oriented nuclear household, would this income not have been spent and invested in a fundamentally

²⁹ See: Saito, "Work, Leisure and the Concept of Planning in the Japanese Past;" Saito, "Gender, Workload and Agricultural Progress: Japan's Historical Experience in Perspective," in Ren  Leboutte, ed., Protoindustrialisation: Recherches r centes et nouvelles perspectives: M lange en souvenir de Franklin Mendels (Geneva, 1996), pp. 129-51; Thomas C. Smith, Nakahara. Family Farming and Population in a Japanese Village, 1717-1830 (Stanford, 1977). This concept is also important to the "labor-intensive path to economic development" explored in several papers by Kaoru Sugihara.

³⁰ This problem is, of course, not unique to extended households. It is also a central issue in the "neo-classical pooled household model." See: Paul Samuelson, "Social Indifference Curves" Quarterly Journal of Economics 70 (1956), pp. 1-21; Gary Becker, Treatise on the Family (Cambridge, Mass, second ed., 1991), Ch. 8, "Altruism in the Family," pp. 277-306.

different way? And, would the household members then not have been spurred to industriousness (or not) by fundamentally different motivations?

These questions directed toward Rosenthal and Bin Wong's highly positive appraisal of the economic efficiency of Chinese extended families during the Qing Dynasty also speak to issues relevant to the Japanese variant of the industrious revolution concept. As originally developed, the Japanese industrious revolution was very much a supply-side phenomenon. It sought to theorize a labor-intensive path toward economic growth by focusing on the productive potential of Tokugawa era peasant households. Consumer demand for market-supplied goods plays no explicit role in this model, and on the supply side, the features of household industriousness emphasized by its theorists (planning, diversification and hierarchy within the household) appear to be motivated more by the limitations of markets, especially factor markets, than by the opportunities they present. In sum, essential features shaping the European industrious household appear to be either weak or missing in the Japanese case.

Recently, Osamu Saito has questioned whether such a sharp distinction should be made between the industrious revolutions of east and west. To be more precise, he has questioned whether the important differences are correctly identified by my emphasis on the role of markets and consumer demand.³¹ To Saito, the basic difference in the nature of the respective industrious revolutions resides in "a structural difference in the ways in

³¹ Osamu Saito, "An Industrious Revolution in an East Asian Market Economy? Tokugawa Japan and Implications for the Great Divergence," Australian Economic History Review 50 (2010), pp. 240-61. My response: Jan de Vries, "Industrious Peasants in East and West: Markets, Technology, and Family Structure in Japanese and Western European Agriculture," Australian Economic History Review 51 (2011), pp 107-119.

which household behavior interacted with market growth.”³² As Japanese households intensified the economic life, they cultivated multiple production activities and learned managerial and coordination skills. Peasant household industriousness was primarily a strategy to maintain autonomy and avoid proletarianization. In Europe, according to Saito, household industriousness cultivated specialization and market dependence, with the resulting social differentiation, rise of a landless population, and widespread wage labor. In both Western Europe and Japan peasant households confronted markets, but there was a structural difference in how they dealt with these markets. In short, Japanese peasant households preserved a basic commensurability, avoiding extreme social differentiation, as it entered the new economic world of the Meiji era. Preserving this valued social ideal was a major motivation for industriousness, which, in turn, made the peasant household an incubator for a valuable type of human capital: disciplined and multi-skilled labor accustomed to strategic thinking.

I do not question all aspects of this story. But I believe this type of household economy was far from autonomous in its decision-making, paid a significant price in economic efficiency, and did not prevent the development of substantial social differentiation. Consequently industriousness in Japan was primarily – but not entirely – motivated by the need to compensate for production inefficiencies engendered by limited factor markets and mobility.

To begin with markets. In my earlier exchange with Saito, it became clear that Tokugawa era peasant households faced expanding commodity markets, but limited factor markets. Development of a wage labor market was limited by a variety of

³² Saito, “An Industrious Revolution,” p. 259.

institutions and customs. Land was not freely bought and sold, and was scarce relative to the size of the labor force in any event. But Saito points to an active market in leased land. He argues, inspired by A. V. Chayanov's model of Russian peasant farming, that leased land could smooth the land/labor ratio of the Japanese household over the course of the life cycle. Just as Chayanov argued against Lenin that inequality in peasant landholding was not so much a sign of persisting social differentiation as it was an artifact of life-cycle differences, Saito sees the land lease market as imparting a degree of flexibility in a Japanese household economy that could not readily release and/or acquire labor in the short term. This would be the case if the lease market acted in a repartitional manner; but this remains to be demonstrated. If land was leased typically by the more prosperous peasant households, it would serve to allow relatively strong families to accumulate more land and increase social inequality.

A second issue concerns the potential productivity of our two types of industrious households. The western European household engages in markets to specialize in production, sends surplus labor into the labor market, and comes to depend on markets for a major part of its consumption. The Japanese household's production techniques are less integrated into the market system, although a large portion of its final output does enter into commodity markets, often in the form of taxes and rents. Does industriousness and the strategic coordination of the Japanese household's labor compensate for the lesser ability to efficiently allocate productive resources?

This question returns us to the issues discussed above with regard to Rosenthal and Bin Wong's defense of the Chinese extended family. In that case I questioned the flexibility of decision making in a multigenerational, kin-based household. In Japan the

family structures were different, but the peasant household was far from autonomous.³³ Village institutions that bear some resemblance to the “corporate” bodies that constrained peasant household decision-making in Central Europe, discussed above, held the constituent households in a warm, but also a restrictive embrace. The extensive networks of *kō* (cooperative and insurance schemes, bearing some resemblance to European confraternities) recently studied by Tetsuo Najita strengthen the impression households firmly embedded in structures of obligation.³⁴

As to social differentiation: the absence of a rural proletariat with no access to land is not the same thing as equality. In the European context, many proletarians (especially if they had craft skills of some sort) were materially better off than marginal farmers (husbandmen, cottars, etc.).³⁵ Thus, while a class-based analysis of a social differentiation would show Japan in, say, 1750, to be more cohesive than any part of Western Europe (where there were many landless proletarians), an income-based analysis measure, such as a Gini coefficient of household income, might not be so very different.³⁶ For this reason, among others, it seems unfruitful to attempt to explain the different paths of rural development in east and west as based on a choice between “strong families” and “strong markets”. European family structures were “weak” long before markets were

³³ Consider Thomas C. Smith, The Agrarian Origins of Modern Japan, Stanford, 1959): “A rice farmer never owned or controlled all of the essential means of production himself, and he could not individually make all of the critical decisions of farming... The habit of obedience to community opinion where water was concerned likewise carried over to other community affairs ... since any serious breach of solidarity directly threatened the communal foundations of farming.” p. 209

³⁴ Tetsuo Najita, Ordinary Economies in Japan. A Historical Perspective, 1750-1950 (Berkeley, 2009).

³⁵ Jan de Vries, “Poverty and Capitalism,” Theory and Society 12 (1983), pp. 145-55.

³⁶ I am unaware of any such comparative study, but base this speculation only on the impressions given in Smith, Agrarian Origins, chapters 11 and 12.

“strong”; it is very possible that they co-evolved over a very long time period.³⁷ The more limited engagements of Japanese households with markets, especially factor markets, and their more limited independence from community structures may have preserved the society from proletarianization, but here too, is it not more likely that there was a co-evolution of the Japan’s market structure with its family structure in the Tokugawa era? In short, family structure and market structure may not have involved a trade off; the distinctive structures of the two zones led to different forms of stratification.

Finally, did the very different structure and social setting of the Japanese household impose a “tax” on potential output that even the cultivation of industrious behavior could not overcome?³⁸ I cannot provide a direct answer to this question based on empirical research, but hold to the view that there was such a “tax”, and a significant one, because of the accumulation of labor in agricultural households and the declining marginal productivity of labor. A strategy used by households in both Western Europe and Japan was to develop by-employments to absorb excess household labor. While this

³⁷ This possibility is explored in Mary Hartman, The Household and the Making of History. A Subversive View of the Western Past (Cambridge, 2004).

³⁸ Measuring the consequences of such adjustments within the household economy is not easy, even in more recent, data-rich times. In historical studies, we often must be content with indirect measurements. In the Japanese case, perhaps the record of the macroeconomic realignment of production as a result of new price signals attendant upon the “opening” of the economy after 1858 can suggest what, at the micro level, a fuller market-orientation of Tokugawa peasant households might have achieved. In the fifteen years following Japan’s fuller exposure to international markets, foreign trade rose from nearly nothing to seven percent of national income. In doing so, the price of Japanese exportables rose rapidly (toward international market levels) while the price of importables fell rapidly (likewise, toward international market levels). Overall, in these years Japan’s barter terms of trade rose by a factor of 3.5. I would not argue that gains of this magnitude were available via a liberalization of domestic market relations, but they will have been considerable See: J. Richard Huber, “Effects on prices of Japan’s entry into world commerce after 1858,” Journal of Political Economy 79 (1971), pp. 1614-28.

was one option in Europe, it was often the only one in Japan, intensifying there the self-exploitation of labor (e.g., tolerating rates of marginal productivity well below the average rate). This strategy does not raise average incomes (it lowers them), but in the specific social context of Japan it elicited a growing supply of disciplined labor.

Thus, in my view, Japanese industriousness was strongly embedded in a social order that limited specialization and imposed a need to compensate for market constraints. But, while this makes it primarily a “supply side” phenomenon, it would go too far to argue that it was entirely so. In Western Europe I argued that that both the motivation of betterment and that of scarcity were present in varying degrees; in Japan the betterment impulse (modern consumer behavior) was also in evidence. It may have found its origins in the growing urban societies, where Franck detected a shift from consumption patterns dictated by status and political symbolism toward a more market-based consumption to secure comfort and sociability. Later, after 1720-30 when rapid population growth that had characterized the first century of the Tokugawa era came to an end, material life in rural areas appears to have been improved. Much of this improvement may have been more of a recovery (especially in terms of per capita food production). But among the better off households, an impulse toward material and social betterment is detected (by Franck and Hanley), and the macro trends of rural production also appear to point in this direction. Between 1720 and 1800, in a period of population stability and a decline in urban population, agricultural output grew (by 23 percent according to Hayami and Miyamoto) while the production of traded rural handicrafts spread in several regions (according to Thomas C. Smith). The question of the spur to industrious behavior may

remain an open question, but the effect of that behavior in securing a more abundant material life appears to be broadly accepted.