The Viability of Niche Marketing Within Global Commodity Chains: An Example from Beef

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Introduction

For good or for ill, there has been a rapid explosion in the use of the word "globalization" both inside and outside of academia. Concomitant with that has been an increased interest in the study of Global Commodity Chains. The creation of these chains is viewed as one of the more concrete manifestations of globalization, while the firms that create and manage them are thought to be one of the primary institutional actors promoting globalization. Although Global Commodity Chains have existed for centuries, the number and complexity of such chains have expanded in recent years. As social relations are evolving in response to this expansion, the analysis of Global Commodity Chains provides scholars with a methodological approach for better understanding how national and global development processes are unfolding (Gereffi, Korzeniewicz et al. 1994).

From a theoretical perspective, one essential goal of studying how Global Commodity Chains are organized is to identify commonalities that exist across different chains (Smart 1994). This would include not only commonalities in the ways in which chains are operated, but also similarities in the social, economic and political impacts of the creation of those chains in particular localities. The main challenge to doing this is that there is a great degree of variability between and within commodity systems (Jussaume 1995; Raynolds 1994). This is particularly true for food and agricultural systems. Because of the biological and environmental aspects of agricultural commodity production, different social forms can develop in response to the vagaries of producing a particular commodity.

This challenge has become even more noticeable in recent years as a result of the growing complexity of commodity systems. Raynolds (1994) has argued that the "fordist/post-fordist" dichotomy that has been used to compare different commodity systems or the same system over time has been overstated. Commodity systems can easily adopt elements of both fordist and post-fordist production systems. Indeed, as we hope to demonstrate in this paper, fordist and post-fordist variations within a commodity system can not only exist side by side, but can even be embedded within each other. In other words, rather than speak of fordist and non-fordist systems, we argue that it is more appropriate to analyze how a commodity system integrates fordist and post-fordist elements.

The goal of this paper is to demonstrate this by presenting an analysis of how some participants in the beef commodity chain in the United States are attempting to diversify their production strategies in an attempt to sell to an overseas niche market. Although our analysis focuses on chain members within the U.S., these individuals can be said to be participating in a global commodity chain because some of their product is marketed overseas. In addition, the strategy we focus on is the adoption of genetic material from Japan in order to develop a product that meets a niche market for high quality beef in that country. Some of those utilizing this strategy are doing so in order to maximize income in the face of oligopolistic control of the meatpacking industry by multinational corporations. Thus, this study provides some insights into how post-fordist elements are being adopted into, but not displacing, a well established global fordist production system.

"Post-Fordism" and Commodity Chains

It is not necessary to review the history of the evolution of the fordist/post-fordist debate in this paper as that has been done in detail elsewhere (Bonanno and Constance 1996). While this debate has strong linkages to French "regulation"

theory, we would like to emphasize that the development of the post-fordist concept was sparked by a strong interest on the part of many scholars in the theory and praxis of regional economic development. A primary motivation was to investigate how social institutions at the community level could take advantage of local human resources to create industrial districts of small, local firms that could compete in global markets (Becattini 1990). Piore and Sabel (1984) built upon this and posited how a new industrial revolution could be constructed on the production of high quality industrial goods by workers who were more akin to craft specialists than industrial line workers.

This idea of skilled labor creating high quality goods in spatial and historical opposition to the production of inexpensive mass goods by a low-paid, routinized labor force has gone through many iterations. It is often expressed by the terms fordism and post-fordism, and has been adapted to debates on agricultural development. Kenney et al. (1989) argued that a fordist model of agriculture was created in the United States in the 1930s and 1940s, but began to weaken in the 1970s as a result of the oil crisis, global food shortages and increased international competition in commodity markets. Others have countered that the fordist model continues to be viable in agri-food production systems (Kim and Curry 1993).

Clearly, the production of high quality commodities for specialized markets, a.k.a. product diversification, is being promoted as a development strategy in agriculture that could help preserve family farming and stimulate rural economic development (Lyson and Geisler 1992; Saitoh 1986). While in many cases the primary markets for foods and agricultural commodities produced under such systems are seen as being local, similar to the example of post-fordist industrial regions, high quality, niche market goods can be produced for international markets as well. At issue is whether the increased number of examples of post-fordist strategies in agriculture and other industries is a harbinger of a clear historical shift in how goods are

produced and consumed (Raynolds 1994).

This issue of whether fordist and post-fordist production systems are distinct forms of capitalist development is reminiscent of a long-standing debate on modes of capital accumulation in agriculture and the difficulties encountered in applying a capitalist industrial model to agriculture. Neo-Marxist political economy theory has long speculated about the sites and rapidity of capitalist penetration into agricultural production (Buttel, Larson et al. 1990; De Janvry 1981; Friedland, Barton et al. 1981; Kautsky 1900; Mann and Dickinson 1978; Mooney 1983; Newby 1983), with a main point of contention being the degree to which capitalist development in agriculture will parallel development in other industrial sectors. While there are many intriguing unresolved theoretical debates that emanate from this research tradition, the fact that some of these debates still are unresolved suggests that the capitalist penetration of agriculture has been a complex and uneven process, leading one scholar to observe that, "there is not a single deductive logic.underlying or determining all relations in a capitalist formation, but there are different, historically contingent principles which we can only investigate through empirical research" (Vandergeest, as quoted in Buttel et al. 1990:92).

It is our contention that Vandergeest's conceptualization of multiple capitalist development logics also can be applied to the fordist/post-fordist debate and an analysis of how Global Commodity Chains are evolving. We argue that not only do post-fordist strategies vary by commodity, but that, depending on historical and cultural contingencies, a post-fordist strategy can be identified with the penetration of capitalist relations as well as with resistance to that penetration. In other words, our research suggests that agricultural niche markets can *simultaneously* offer an alternative to vertically integrated, capital controlled mass production/consumption regimes while also providing a means for the reproduction of those very same regimes. We illustrate this process by analyzing how a small number of

individuals in the beef commodity chain in the U. S. have begun to introduce *Wagyu* cattle genetics from Japan into their herds in order to produce a higher quality beef product for specialty markets in Japan and the United States. To better appreciate how this process of innovation has taken place, we first present a brief sketch of the beef commodity system in the United States.

The Structure of Beef Production in the United States

The beef industry in the United States is relatively unique in comparison to other agricultural commodities in terms of the number of stages of production and the variation in the degree of competition at each stage. The beef industry is known for being highly industrialized and oligopolistic (Niiyama 1992; Andreas 1994). However, this concentration takes place at the meatpacking level, which involves the slaughtering and processing of the beef. In the U.S., four agri-food firms dominate the industry as a result of numerous mergers that began in the 1970s and a lack of antitrust law enforcement of antitrust laws during the 1980s (Azzam and Pagoulatos 1990; Marion and Kim 1991). As a result, "In the beefpacking industry specifically, there is agreement among several studies on the existence of a negative relationship between packer concentration and price of slaughter cattle in regional procurement markets" (Schroeter 1990: 1227).

However, although meatpacking is highly industrialized and oriented towards mass production, cattle ranchers are typically raising cattle in a manner similar to that of their parents and grandparents before them. The cattle crop that is sold to feedlots is the product of a chain that includes more than one petty commodity producer. First, there are ranchers who specialize in the production of purebred bulls and heifers that are sold to ranchers who produce calves. Cow-calf ranchers then utilize these animals, or semen and eggs purchased from breeders, to develop a cow herd, often mixed-breed, to produce calves. Those offspring not used to replace cows,

including bull calves that become steers, are sold to feedlots, many of which are still operated by families, although the number of feedlots has decreased in recent years as their size has grown.

While meatpacking is highly oligopolistic, the opposite is true for ranching. This is because ranching generally takes place on the most marginal lands that can not be used for the production of other agricultural crops. In extreme cases, it may take more than 20 acres of land to sustain a single cow, and her calf, for a single year. Thus, cattle and calf operations are the single most numerous type of family farm operation in the United States, with the largest average size of farm, but relatively low incomes and a high rate of off-farm employment (Tweeten 1994). In Washington State, for example, nearly half of all farms with cattle and calves in 1992 had a heard of less than 20 head (Table 1).

The production of cattle is categorized by a large number of small ranchers producing a relatively undifferentiated commodity (beef) for prices that are controlled by a small number of oligopolistic firms. This mass-production system has developed alongside a parallel system of mass consumption. During the post-WWII era, in particular, beef has become one of the centerpieces of the U.S. diet, at the same time that small butcher shops were being replaced by supermarkets that moved from a system of cutting to order by in-house butchers, to the selling of pre-packaged, pre-cut meats (Walsh 1993). Once again, many of these changes have been driven by the large meatpackers, who sit at the fulcrum of an integrated beef production system.

Wagyu and Meat Eating in Japan

To properly understand the significance of introducing *Wagyu* genetics into United States beef herds, a brief review of the history of beef consumption and production and Japan is constructive. Until 1882, the eating of the meat of four legged animals, including beef, was frowned upon in Japan, due to Buddhist influences (Simpson et al. 1985). Beef consumption has grown slowly in

TABLE 1

Number of Farms and Cattle on Farms in Washington State

	1974		1992	
Number of Cattle and Calves on Farm	# of Farms	# of Cattle and Calves	# of Farms	# of Cattle and Calves
1 to 9	1,335	6,077	4,015	20,423
10 to 19	1,235	17,381	2,664	36,048
20 to 49	2,929	95,891	2,902	89,353
50 to 99	2,381	166,995	1,504	103,744
100 to 199	1,633	219,569	1,039	144,784
200 to 499	908	261,389	975	290,031
500 to 999	165	110,276	260	175,101
1,000 to 2,499	64	92,808	87	120,677
2,500 or more	22	161,358	23	78,729
5,000 or more	not reported	not reported	15	211,385
Total	10,672	1,131,744	13,484	1,270,275

Source: U.S. Department of Commerce, Bureau of the Census, *Census of Agriculture*, Vol. 1, Part 47.

Japan since that time, but due to a variety of factors, including the amount of beef consumed[1], and the ways in which beef is prepared and eaten, the quality and cuts of beef purchased are relatively unique.

Previous to the revocation of the ban against eating meat in 1882, cattle were present in Japan, but were used primarily as a source of animal power in certain regions of Japan. As a result, these animals were bred differently, and developed as a small, fine-boned animal. At the turn of the century, in an effort to improve these native cattle for use as beef stock, European cattle genetics were imported and blended with the native

stock. This crossbreeding eventually led to the development of the four modern Japanese breeds (Japanese Black, Japanese Brown, Japanese Poll and Japanese Shorthorn), which are known collectively as *Wagyu* (literally: "Japanese Cattle") (Longworth, 1983).

These cattle, which until recently were only found in Japan, produce a genetically unique type of beef that is highly valued by consumers because of it's wonderful taste and extreme tenderness, due in large part to the *Wagyu's* ability to marble extensively with little backfat. Not only have the Japanese developed a liking for a different kind of beef, but also prepare and eat it differently as well. One the most preferred styles of cooking beef in Japan is found in the dishes *Shabu-Shabu* and *Sukiyaki*. In both cases, the meat is thinly sliced and is placed in boiling water along with a variety of vegetables, and resembles a traditional method for cooking fish and vegetables. *Shabu-Shabu* and *Sukiyaki* require the use of heavily marbled beef to maintain tenderness during the boiling process. *Wagyu* beef is well suited for this cooking process.

During the 1950s and 1960s, *Wagyu* cattle were produced as a sideline, often one or two head at a time, by farm households. Over the past three decades, average herd sizes have increased as production has shifted to farms that focus on meat production. Unlike the U.S., however, farmers that produce *Wagyu* calves also feed these calves to market, and sell their animals through cooperatives at publicly managed meat wholesale markets. In comparison to the U.S. system, animals are fed for extended time periods and farmers spend a great deal of effort on every individual animal, which are sold at auction on a carcass-by-carcass basis.

Wagyu meat is very highly prized in Japan and commands a significant price premium in comparison with domestic dairy fed beef and imported beef. Depending on the cut, wholesale prices in Japan for selected *Wagyu* beef cuts can be 50 to 75 per cent higher than for comparable dairy steer cuts that are produced domestically (Mori and Gorman

1995)[2] *Wagyu* accounts for approximately 40 percent of all beef produced in Japan, and 15 to 20 percent of all beef consumed in that country. *Wagyu* Cattle are fed for extended periods and producers receive price premiums if they are successful at producing a superior product that is highly valued by consumers. Standardized U.S. and Australian beef that is imported into Japan can not capture such price premiums. As a result, interest has begun to grow on the part of a few individuals in the U.S. and Australia, as well as by some Japanese firms, in obtaining *Wagyu* genetics and producing a culturally specific product for export to the Japanese market.

U. S. *Wagyu*

In 1976, four *Wagyu* bulls were imported into the United States from Japan. At the time, the breed was no more than a curiosity in the United States, and there was little interest in developing it for the Japanese market or for Japanese restaurants in the United States. However, selected individuals became interested in the breed in the late 1980s as a result of the formal announcement of Japan's beef import liberalization policy. This interest was stimulated in part by inquiries made by Japanese firms into the feasibility of producing *Wagyu* cattle under U.S. conditions. Two universities (Washington State University and Texas A&M University) began conducting research on the breed and the meat it produced, and began working with interested producers on developing the breed in the U.S.

Our research project began in the Fall of 1996 and had as its primary objective an evaluation of whether the *Wagyu* research being implemented at Washington State University was benefiting cow/calf producers, feedlot operators and local communities. This was part of a larger effort to evaluate the social and economic impacts of agricultural research being conducted at land grant institutions. Thus, our analysis is based upon the experiences of producers affiliated with Washington State University's *Wagyu* research program. After briefly describing our research methods, we explore the

various factors that are shaping *Wagyu* production and distribution strategies.

Methods

This study was initiated with a series of exploratory qualitative interviews with *Wagyu* researchers and other key informants who had intimate knowledge of beef cattle production. Because the initial interviews revealed a great deal of diversity among users of *Wagyu* technology and a complex production and distribution system through which the technology moves, further qualitative interviewing, rather than a standardized mail survey, was deemed to be a more appropriate method for completing the technology assessment. Because of time limitations and the geographical scattering of potential participants, we opted to use a semi-structured telephone interview for the remaining interviews. The data collection phase of this research concluded with the completion of 15 face-to-face and 20 telephone interviews. Face-to-face interviews were recorded and detailed notes were taken of all interviews. All notes and recordings were transcribed.

Purposive snowball sampling was used to locate potential participants. Sampling was initiated with a list of participants in Washington State University's *Wagyu* research program. Each contact from the list was asked to name other *Wagyu* producers not on the list so we could trace the diffusion of the technology as well as sample a broad spectrum of producers. Interviews were also conducted with several cattle producers and a packing plant executive who had either declined to use *Wagyu*, or had been, but were no longer involved, with *Wagyu*, in order to determine similarities and differences between *Wagyu* adopters and non-adopters and to gain a better understanding of *Wagyu*'s potential place within the beefcattle industry. Sampling continued until saturation of theoretical categories was achieved (Glaser and Strauss, 1967).

Analysis

According to nearly every individual interviewed for this research, the beef cattle industry in the U.S. is in the midst of a deepening crisis. There was also fundamental agreement about the nature and sources of this crisis. In recent years, overall beef consumption has been flat while consumption of other meats has been increasing, indicating that beef's "market share" has been in decline. Most of our interviewees believe that part of the reason for this development is that there is little quality consistency in the beef being marketed in the United States.

Furthermore, the small cattle rancher feels that ranchers everywhere face increasing difficulty in weathering the fluctuating economic cycles of the beefcattle industry. The sources of the crisis include the disjunctures created by the oligopolistic control at the fabrication/distribution end of the commodity chain, and the persistence of small entrepreneurial, family owned ranches at the cow-calf end of the chain. The disjunctures are exacerbated by the traditional practices of cow-calf producers and the control of cow-calf production by a multiplicity of producers who vary greatly in motivations, skill and knowledge, breeds of cattle used, and available resources and capital. Further complicating the situation is the fact that each sector of the industry desires different product characteristics. With each iteration, beef quality is de-emphasized.

These factors, which have led to an unhappy situation for many producers, small feedlot operators, the occasional independent packers, and beef consumers, are shaping the ways in which post-fordist elements are being adopted into, and embedded within, the existing beef production system. The following analysis will show that attempts to successfully produce and distribute *Wagyu*, both to Japan and within the U.S., are taking two predominant forms, and that these divergent strategies reflect the complex interactions of these various factors.

"Wagyu are unexcelled in calving ease and palatability — especially compared to Semintols — they were a joke. I used to say to the vet: 'sew a zipper in that one so we don't have to do another c-section.' When using Wagyu on first-calf heifers I don't even get up at night. I just get up in the morning and count how many new ones I have." (*Wagyu* producer)

"To look at 'em in a pen of fat cattle — they don't look good — but when you hang them up on a rail, that Wagyu cut outgrades them all and that's worth a lot more money" (*Wagyu* producer)

"We smoked a 3/4 Wagyu bull for our daughter's wedding reception. Everybody that had it said they've never had such nice beef." (*Wagyu* producer)

"They all think they deserve more money for their pet breed. They all want value-based marketing, but everything can't be better than everything else" (packing plant executive)

Hopes and dreams for better future arrangements are contained in the narratives of *Wagyu* producers. Indeed, the enthusiasm for *Wagyu's* positive attributes, when not dampened by resistance within other sectors of the beef production system, can take on nearly mythic dimensions. Most *Wagyu* producers anticipate tapping into the Japanese market, as well as participating in the development of domestic niche markets for a premium grade of beef. It is hoped that the creation of domestic outlets for *Wagyu* will lead to a greater emphasis on quality industry-wide, and a more favorable economic environment for smaller producers who would otherwise remain locked into a beef commodity system where they are disadvantaged relative to the packing sector.

According to many of our interviewees, *Wagyu* may signal a turning point for the American beef

cattle industry for several reasons. First, it is one of the few breeds ever imported for its quality rather than quantity characteristics. The American GI's serving in Europe during WWII were enamored of the size of the continental breeds and the emphasis on pounds has subsequently become institutionalized in the beef cattle industry. Progressive cattle growers deem *Wagyu* as a mechanism for shifting perceptions within the industry that in recent decades has been focused more on quantity than quality.

Second, one of the most costly aspects of cattle production is dystocia (birthing difficulties). The loss of calves, the labor needed to monitor calving herds and to "pull" calves, particularly with first-calf heifers, and the subsequent loss of heifers or their inability (or latent ability) to breed back, has constituted one of the most significant sources of income loss for the cow-calf producer. For many ranchers, this is also a significant source of emotional trauma, as they feel responsible for the suffering born by the mothers. As *Wagyu* calves tend to be smaller than most other breeds, dystocia is not as problematic when non-*Wagyu* cows are bred to *Wagyu*.

Third, heifers crossed with *Wagyu* produce calves that develop into high quality carcasses. Many U.S. ranchers typically breed their first-calf heifers to Longhorns, which offer low birth weight calves, but also sub-standard quality beef. Ranchers can be docked as much as ten cents per pound for their Longhorn calves, so producers who use *Wagyu* genetics on first-calf heifers can hope to avoid a price penalty.

Fourth, resources such as grain have become relatively scarce and thus expensive, offering another advantage to the *Wagyu* producer: *"A positive thing about Wagyu is you can leave them on grass a little longer."* (*Wagyu* marketer) *Wagyu* cannot be "crowded" on feed as they take longer than other breeds to mature, and gain weight slower than other breeds. While slow growth rates have been viewed traditionally as undesirable, this trait in *Wagyu* may work quite well with the changing resource base of cattle ranchers, if it can help producers create a high quality

product on less expensive resource inputs (i.e. grass vs. feed grain).

In the Shadow of the Giants

> *"Wagyu meat is like Starbuck's coffee or micro-brewed beer, but we can't use it to our advantage because of the distribution system. Gotta find someplace where you can kill 'em, get 'em inspected, get 'em fabricated, and get 'em delivered."* (*Wagyu* producer)
>
> *"It's a shame that the beef industry has been lost by the people that care about it the most and it's controlled by the people that care the least for the quality"* (*Wagyu* producer and veterinarian)
>
> *"The 'big three' aren't interested. They buy cattle on averages and so a value-added product like Wagyu doesn't fit their system. A commodity operation means beef is beef"* (*Wagyu* marketer)
>
> *"The reward system isn't there to promote quality"* (*Wagyu* breeder)

Each of the above comments made by *Wagyu* producers are representative of sentiments expressed by nearly all the participants in this research, and implicate the large packing companies that dominate the beef fabrication and distribution system in the U.S. as being responsible for the industry's troubles and the producer's inability to market *Wagyu* within the domestic system. Certainly, the concentration of control under a few packers has led to an institutionalization of their interests, and consequently presents obstacles to successful entrepreneurial innovation. Meatpackers typically buy cattle according to a commodity pricing formula rather than per carcass performance. The producer is paid the same amount for his or her lowest and highest quality carcasses, with the packer capturing any profits from prime carcasses that happen to be produced. The producer neither realizes he/she has produced a prime carcass, nor receives any feedback

that he/she can utilize to reproduce that quality. Retained ownership has been promoted as an alternative, but this strategy is very risky because cow-calf operators are not in control of the feeding process, have to wait until slaughter before they can receive any income, and must assume the risk of lower prices if a carcass does not grade well.

Many interviewees appear to be attracted to *Wagyu* as a means for re-capturing some of the profits that accrue to large meatpackers by producing beef of such consistent quality that this risk is minimized, and they can be rewarded for their extra efforts. The difficulty in engaging in such a strategy is that it is difficult to market a product outside of the standard, oligo-polistically controlled channels. *Wagyu* participants are hopeful that an alternative *Wagyu* marketing system can be developed to sell their product to Japan as well as to domestic niche markets. The viability of *Wagyu* will be heavily dependent on the ability to create an alternative marketing system.

The Role of Tradition and Cultural Differences

> *"Cattle people are the hard-headedest. They look at the wrong things to judge quality. They think Wagyu looks like a dairy cow"* (*Wagyu* producer)
>
> *"I think we're going to have to start answering to the consumer.Those days of saying we'll produce it, someone will buy it is no longer true. because we've seen a decline in the consum-ption of beef since the 1970s and it's not getting any better"* (*Wagyu* producer and genetics broker)
>
> *"I always hear the Japanese are tough, "but if you read the fine print and sell them what they want, they are easy to deal with. And they always pay their bills not like Americans who often try to cut the bill one way or another"* (*Wagyu* breeder)

One of the interesting contradictions that the introduction of *Wagyu* has helped to highlight is how the weight of tradition within the industry at the cow-calf level can serve to hold back the development of the industry in a way that could challenge the influence of the large meatpackers. Although many producers, including those who do not produce *Wagyu*, commonly criticize the structure of the industry, they also do not feel comfortable in engaging in an alternative strategy, like *Wagyu* production, that would necessitate their adopting some new management practices. Many producers have been reared to be "good cattlemen" (and occasionally "good cattlewomen") and are not comfortable dealing with marketing issues, particular those related to understanding the needs of non-U.S. markets. We believe it may be significant that many of the producers that we interviewed who have adopted *Wagyu* have had previous work experiences in marketing, either outside or inside of the beef industry. In addition, some producers are understandably nervous about adapting what some see as a new "fad," given that many have lost money to other fads in the past.

Other Problems

> *"The other super big problem would be our grading system. It's basically back in the dark ages"* (*Wagyu* producer)
>
> *"It was important that the genetics be given to research institutes to prove the worth of the cattle from an unbiased position."* (*Wagyu* producer)
>
> *"So the Japanese are starting to invest their dollars into what really drives a business and that is the packing end of it — the fabrication of beef. The Japanese like investing in the West Coast. They're used to dealing with us"* (*Wagyu* producer)
>
> *"Right now we feed them all the same. We don't care, we put them all in these great big feed lots with 500 head in the pen, even though we*

know the end result is cattle are different" (*Wagyu* producer)

The biggest problem with the development of *Wagyu* is that the current Fordist production system is not geared towards its adoption. As some of our interviewees noted, the dominant system in the industry does not send consistent signals, and is not very flexible, because each stage of the system is focused on different aspects of the final product. As one interviewee put it:

Each sector of the industry defines quality differently. The producer defines a quality calf as one that has hybrid vigor, gains weight, and weans easy. The feeder defines it as gainers that don't get sick. Packers look solely at pounds.

This is one reason why most *Wagyu* producers only adapt part of their operations to *Wagyu*. They do not concentrate solely on *Wagyu* nor do they abandon their participation in the dominant system. To do so is too risky. In addition, the major alternative to the U.S. system that exists is being financed to a large degree by Japanese firms. Producers who adopt *Wagyu* are part of a system that they can not escape from, and their only recourse is to develop a mixed approach that can leave them with some breathing room within the dominant system. They can not freely and wholeheartedly adopt an alternative production strategy because there is no viable alternative to the current system. So, innovative producers fold *Wagyu* into their existing operations as an element of a complex strategy that hopefully is useful in maximizing income and reducing risks.

Yet many producers hold out hope for a truly alternative system, one that would reward them for their extra efforts and their interest in producing a high quality product. Their hopes have been buoyed by inquiries from potential domestic clients outside of the dominant system for high quality beef. However, the ability to create an alternative system is dependent on raising capital not available to those outside the dominant system. For example, during the interview process, several interviewees were excited by rumors

of a cutting edge processing facility in North Dakota that would be geared for export fabrication, but would also process for domestic niche markets. Further inquiries revealed, however, that the company was unable to raise the $43 million in capital necessary to go into business. Thus, while some producers can blend *Wagyu* into their normal practices, hopes for creating an alternative system are elusive.

Of Panaceas

> *"So the sleeper is, if you could figure out how to come up with a better than prime carcass consistently, and then develop a domestic market for it, I think you'd do fine. If you can get the genetics right, then the infrastructure will develop to accommodate it — though it may be on a small scale at first."* (*Wagyu* producer)
>
> *Individual producers need to cooperate and change strategies to compliment the alliance. Seeing the transition phase now. Old habits die hard — especially among cattle people."* (*Wagyu* producer)

Wagyu producers are at a stage where they need to begin thinking about what kind of commodity system they should support to help provide a foundation for the new kind of marketing strategy they envision. One option is strategic alliances, where producer or packer/producer cooperatives are formed and where each producer is responsible for utilizing feedback from the packer to improve quality standards. The other option, which is already being developed by a regional capital that has ties to Japanese interests, is a system of contract buying where individual growers yield nearly all production decisions to the integrator who maintains relationships with Japanese buyers. One is a vertical, hierarchical arrangement, while the other is horizontal. The strategic alliances strategy would distribute knowledge and benefits more equally, while the other benefits the integrator more than the producers, though the

latter do benefit financially in comparison to the current system.

From a theoretical perspective, we are left with a dilemma. Can either or both of these alternatives be classified as post-fordist?[3] More importantly, can either be successful, and if the answer is yes, then which is more likely to be viable? Given the size of the market for *Wagyu* and the current structure of the U.S. beef commodity system, we feel that it is unlikely that both strategies can exist side by side. Furthermore, it is unlikely that either system can exist without the financial support of some large firm, although this conceivably could be a non-U.S. firm.

Because those who engage in *Wagyu* production are such a diverse group, with multiple interests, we feel that it is unlikely that a truly horizontal system can develop. The traditional culture of the cattle industry is one that is centered around individuality. The vertical strategy appears to be more viable, in part because it makes use of a form of contractual relationship that parallels the one used in the current system. In other words, a *Wagyu* system that has elements of the dominant system may be more likely to survive than an alternative, post-fordist system.

Conclusion

Our research suggests that while new agricultural products destined for niche markets, like *Wagyu,* may offer a post-fordist alternative to mass production/consumption regimes, and therefore a marketplace advantage to small producers who have been unable to increase their profitability in the face of oligopolistic control of the beef industry, they also offer a site for large firms to appropriate new innovations introduced into the marketplace. While there may be potential for *Wagyu* to contribute to a new industrial revolution, our research shows that there also is a very real possibility that this potential could be largely captured by a few opportunistic entrepreneurs who might become, in addition to the current major meatpackers, a new source of domination in the cattle industry.

This is what compels us to argue against the notion that fordist and

post-fordist are concepts that should be used to identify separate production regimes. Clearly, *Wagyu* genetics are being utilized by a distinct group of entrepreneurs who are interested in producing a differentiated, high-quality product for specific niche markets. Yet, ranchers who are employing *Wagyu* genetics are doing so on a limited scale, in part because no alternative post-fordist marketing system has been, or is likely to be, created. This does not mean that the current system is static, or that alternative marketing possibilities do not exist. However, *Wagyu* genetics and quality based production practices geared towards global niche markets are being adopted *within* a fordist system that is well entrenched and not likely to wither away in the future. For this reason, we do not believe fordist and post-fordist systems are distinct, and would call for further empirical evaluation of other commodity systems to determine if the embedding of post-fordist elements with fordist systems is a comparatively rare or commonplace occurrence.

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Notes

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[1] Which is low in part because Japanese consumers continue to consume large quantities of fish and soybeans (Yamaji 1987).

[2] Chadee and Mori (1995) report that in June 1994, the wholesale price for *Wagyu* sirloin was –5,589 per kilogram, for Japanese fed dairy steer was –1,760 per kilogram, and for Australian beef was –1,030.

[3] A third strategy that is being engaged in by some producers is one in which they use *Wagyu* genetics for calving ease only. However, the progeny are not differentiated when sold, and so can not be considered to be part of any attempt to achieve greater economic returns or market a higher quality product, so we do not consider it here.