

The World's Largest Open Access Agricultural & Applied Economics Digital Library

## This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
<a href="mailto:aesearch@umn.edu">aesearch@umn.edu</a>

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

# Causes and Consequences of Fast Food Sales Growth

Mark D. Jekanowski (202) 649-5394 markj@econ.ag.gov

ith today's hectic lifestyles, time-saving products are increasingly in demand. Perhaps one of the most obvious examples is fast food. The rate of growth in consumer expenditures on fast food has led most other segments of the food-away-fromhome market for much of the last two decades. Since 1982, the amount consumers spent at fast food outlets grew at an annual rate of 6.8 percent (through 1997), compared with 4.7 percent growth in table service restaurant expenditures. The proportion of away-from-home food expenditures on fast food increased from 29.3 to 34.2 percent between 1982 and 1997, while the restaurant proportion decreased from 41 to 35.7 percent (Clauson).

At roughly \$109.5 billion in 1997, fast food sales are approaching the amount spent at table service restaurants (\$114.3 billion in 1997, including tips), despite fast food's much lower average cost per meal. Between 1990 and 1997, fast food prices rose only an average of about 2 percent per year, according to the Consumer Reports on Eating Share Trends (CREST) data, implying

increased consumption caused the majority of expenditure growth.

#### Demand for Convenience Drives Expenditures

People want quick and convenient meals; they do not want to spend a lot of time preparing meals, traveling to pick up meals, or waiting for meals in restaurants. As a result, consumers rely on fast food. Knowing this, fast food providers are coming up with new ways to market their products that save time for consumers. For example, McDonald's currently has outlets inside nearly 700 (out of 2,374) Wal-Mart stores across the United States, and almost 200 outlets in Chevron and Amoco service stations. These arrangements are becoming more common in the fast food industry. Consumers can combine meal-time with time engaged in other activities, such as shopping, work, or travel. This idea shapes the growth strategies of most firms in the industry-strategies that can be characterized by this passage from the 1994 McDonald's Annual Report (The Annual):

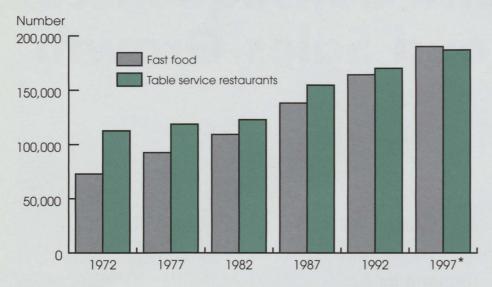
McDonald's wants to have a site wherever people live, work, shop, play, or gather. Our Convenience Strategy is to monitor the changing lifestyles of consumers and intercept them at every turn. As we expand customer convenience, we gain market share.

The number of fast food and restaurant outlets in the United States has risen steadily over the past 25 years (fig. 1). Although the official 1997 United States Census count has not yet been released, it is expected that, for the first time, the number of fast food establishments has surpassed the number of table service restaurants. The rapid rate at which the fast food industry continues to add outlets is as much a reflection of consumer demand for convenience as it is a reflection of demand for fast food itself. Expanding the number of outlets increases accessibility, thus making it more convenient for consumers to purchase fast food. Especially in recent years, much of the expansion has been in the form of "satellite" outlets, similar to the McDonald's outlets mentioned above. These tend to be smaller in size, with little or no seating capacity, and are often in nontraditional locations, such as office buildings, department stores, airports, and gasoline stations; locations chosen specifically to maximize convenience and consumer accessibility. The 1992 Census of Retail Trade reports that roughly 23 percent of all fast food establish-

The author is an agricultural economist with the Food Markets Branch, Economic Research Service, USDA.

Figure 1

Number of Restaurant and Fast Food Outlets in the United States



Notes: \*Projected. Source: Census of Retail trade; National Restaurant Association.

ments do not have seating for onpremise dining, catering instead exclusively to consumers who "eat on the run."

## Unique Characteristics of Fast Food

Rising incomes, longer workdays, and a growing tendency for both spouses to hold full-time jobs are widely credited for the rise in awayfrom-home expenditures of all types, but fast food especially benefits from these trends. The fast food industry focuses heavily on rapid consumer turnover, speed of service, and take-out sales. Aside from obvious menu differences, fast food is less expensive than table service restaurant meals, has a larger lunchtime clientele, and is sold by firms that are predominantly franchised—which provides consistency in terms of product quality and menu offerings (table 1). Dollar sales per fast food outlet nearly match sales per full-service restaurant, despite higher meal prices and greater seating capacity at restaurants.

CREST data report that offpremise traffic accounted for just over 64 percent of all fast food sales in 1997, a figure which has been increasing slowly, but steadily, for some time. In 1990, just over 61 percent of fast food sales were for offpremise consumption. The dominant form of off-premise dining in the foodservice industry is carryout, but the drive-thru, a concept that Wendy's introduced in 1974, is especially important in fast food. Company records show that about 60 percent of the sales at Burger King and 54 percent at McDonald's are made at the drive-thru.

In the fast food pizza segment, delivery dominates, with firms like Dominos, Papa Johns, and many independents focusing almost exclusively on delivery sales. Pizza Hut began delivery service in 1986, and today 34 percent of the units are devoted exclusively to delivery (offering no on-premise dining capacity). Systemwide, off-premise dining accounts for almost 60 percent of Pizza Hut's sales, and 63 percent of all establishments offer delivery service. Table 2 reports the percentage of off-premise sales for

some of the largest firms in the industry.

## Increasing Competition from Supermarkets

Most fast food chains emphasize convenience and low prices by offering a narrow range of menu items, which are usually based around "hand-held" foods. However, firms like Boston Market, Koo Koo Roo, and Kenny Roger's Roasters are blurring the lines between fast food, casual dining, and supermarket foodservice by expanding menus to include fully prepared, multi-course meals for eat-in or carry-out. These firms promote a "home-cooked" image by offering entrees such as ham, meatloaf, roast beef, and baked chicken, along with numerous vegetable choices. This type of fare, dubbed Home Meal Replacements (HMR's), is intended to eliminate the need to cook at home by providing a wide variety of higher quality foods that are as convenient and affordable as fast food.

Many supermarkets are capitalizing on the popularity of HMR's by increasing the quality, variety, and promotion of their own HMR offerings. Ronald Larson provides a detailed overview of this market. Supermarket HMR's are often designed to be easily reheated in the oven or the microwave at home, and can be stored for several days in the refrigerator without significant reductions in quality. This provides a certain advantage over most traditional fast food offerings, which are usually intended for immediate consumption. The widespread adoption of microwave ovens by United States households (now in nearly 90 percent of homes) contributes to the convenience of HMR's for takeout.

Estimates of 1997 sales of prepared meals and components at supermarkets vary widely, ranging

Table 1
Selected Characteristics of Restaurants and Fast Food Firms

Item	Fast food outlets	Restaurants, lunchrooms
		Dollars
Estimated average cost per meal <sup>1</sup>	4.27	10.71
Annual sales per outlet (\$1,000)	472.71	500.51
		Percent
Percent of total sales during: Breakfast (6-11 a.m.) Lunch (11 a.m. to 5 p.m.) Dinner (5-11 p.m.) Overnight (11 p.m. to 6 a.m.)	9.94 46.88 40.32 2.86	7.80 31.91 57.19 3.10
		Number
Paid employees per outlet	17.56	16.14
Average seats per outlet	48.14	83.84
	cials oversees and emocraticous	Percent
Percent of outlets franchised Operated by franchisee	52.19 32.38	9.97 4.44
Top three primary menu themes in each industry, based on total sales <sup>2</sup>	Hamburger (43.56) Pizza (15.04) Chicken (8.83)	Seafood (10.27) Italian (9.37) Mexican (6.74)

Notes: <sup>1</sup>Based on a sales weighted average of seven average cost-per-meal categories. <sup>2</sup>Numbers in parentheses are percent of total category sales. Source: Compiled from the 1992 Census of Retail Trade Miscellaneous Subjects series.

from just under \$7 billion to about \$14 billion (see "Grocery Industry Courts Time-Pressed Consumers with Home Meal Replacements," this issue). By comparison, the entire sales of the variedmenu/casual-dining segment (Applebee's, Chili's, TGI Fridays, etc.) was \$20 billion in 1997 (Paul). Though supermarkets tend not to be as conveniently located as most fast food outlets, consumers clearly enjoy the quality and variety of many of their prepared meal offerings. Plus, the Food Marketing Institute reports that consumers average 2.2 trips to the grocery store per week, giving them ample opportunity to regularly purchase HMR's. These could become a major competitor to traditional fast food.

#### Growth in Fast Food Affects Many Agricultural Industries

Food and drink purchases by the restaurant and fast food industries have increased considerably over the past 25 years (fig. 2). The growth in fast food expenditures is reflected in the food and beverage purchases by this industry. The limited menu aspect of most of the major chains means that their growth can have an enormous effect on selected segments of the agricultural marketing system. For example, Pizza Hut uses approximately 2.5 percent of all the milk produced each year (over 3.2 billion pounds) to meet its annual cheese requirements. When it introduced its Stuffed Crust Pizza in 1995, Pizza Hut required approxi-

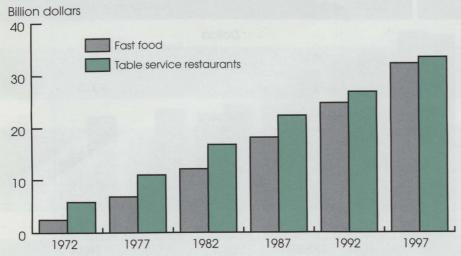
Table 2
Off-Premise Dining at Major Fast
Food Restaurants

Firm	Sales for dining off-premise	
	Percent	
Burger King KFC Wendy's Pizza Hut Taco Bell McDonald's	75 71 65 60 59 60 +	

Note: Source: Company Records.

mately 17.5 million pounds of string cheese, almost 50 percent of the total United States production at that time. McDonald's 1996 beef usage

Figure 2
Annual Food and Drink Purchases Made by U.S. Restaurant and Fast Food Firms



Note: Source: National Restaurant Association, Foodservice Industry in Review, various issues.

exceeded 644 million pounds, and potato usage was about 1.35 billion pounds, approximately 2.5 and 3.2 percent of total United States production, respectively.

### Agricultural Producers, Processors, and Food Suppliers

Menu changes by any major firm can have enormous, almost immediate, effects on particular agricultural industries. McDonald's introduced Chicken McNuggets to its domestic menu in 1983; by 1984, it became the world's second largest purveyor of chicken. In 1996, chicken usage at McDonald's exceeded 256.7 million pounds, accounting for over 1.4 percent of total United States broiler production (boneless equivalents). After public concern over saturated fat intake led the three largest fast food hamburger chains-McDonald's, Wendy's and Burger King-to switch in 1990 from cooking with beef tallow to cooking with vegetable oils, the demand for vegetable oils increased by 250-300 million pounds per year (Lipton, et al.),

which equals roughly 6 percent of the total 1990 vegetable oil production.

The fast food industry's largescale, nonseasonal demand for particular food products of consistent quality has prompted vertical coordination within the agricultural production system. Many of the major chains have contractual arrangements with food suppliers, which often reach all the way back to the agricultural producer. The J.R. Simplot company is the world's largest supplier of frozen french fries, due in large part to its contractual arrangement with McDonald's. Simplot in turn contracts with over 1,000 United States potato growers producing over 100,000 acres—in addition to that grown directly by Simplot—to supply this demand. Keystone Foods is the world's largest supplier of hamburgers because of its arrangement to supply McDonald's with frozen patties. Contracts and other vertical arrangements also provide fast food chains with stable supplies of specialty vegetables, such as lettuce, tomatoes, and onions.

Vertical coordination of the supply chain, especially through production contracts, helps ensure that fast food firms receive a constant supply of the desired input without the degree of price volatility often found in the open market. Suppliers (including agricultural producers) benefit from the reduced price volatility and the assurance of having a buyer for all of their production. To maintain consistent quality of agricultural inputs, the firms at the retail end of the supply chain often make primary management decisions regarding production practices.

Agricultural inputs comprise a relatively small proportion of the price of a meal at most foodservice outlets. Food expenditures typically account for less than one-third of the cost of a meal (table 3), and since much of this food is processed before it enters the retail outlet, the farm value of these inputs is even less. Therefore, changes in the price of farm commodities have an exceedingly small effect on restaurant and fast food prices, and viceversa. Many other factors influence menu prices, including the general inflation rate, wage rates, and competition between firms.

#### Consumers

The fast food industry receives a lot of attention regarding its effect on consumers' nutrient intake and the public health. The switch to vegetable oils for deep-frying by the largest fast food hamburger chains was a response to consumers' concern over the health effects of saturated fat intake. Much of the longterm decrease in per capita consumption of raw agricultural commodities, in favor of more highly processed ones, can be traced at least in part to the growth of fast food. Since 1970, annual per capita use of fresh potatoes decreased from

Table 3
Cost of Goods Sold at Restaurants and Fast Food Outlets

Operating expenditures	Fast food restaurants	Full-service restaurants (average check per person under \$10)	Full-service restaurants (average check per person \$10 and over)
	Percent		
Cost of food sold Cost of beverages sold Salaries, wages, employee benefits Restaurant occupancy costs Direct operating expenses Marketing and entertainment Repairs, maintenance, and depreciation Utility service Other <sup>1</sup> Income before income tax Total	28.4 1.2 27.9 7.4 6.7 5.8 5.1 2.8 5.2 9.5	32.2 3.2 31.9 5.2 7.0 2.5 4.0 3.2 7.2 3.6 100.0	30.0 7.8 31.1 5.3 6.5 3.4 3.4 2.3 6.7 3.5

Notes: <sup>1</sup>General and administrative expenses, corporate overhead, and miscellaneous expenses. Source: National Restaurant Association, Restaurant Industry Operations Report.

61.8 pounds to less than 50 in 1995, while consumption of frozen potatoes (mostly french fries) increased from 28.5 pounds to over 58 per capita (Lucier and Plummer). Per capita fluid milk consumption fell from 258 pounds to 211, while cheese consumption increased from 11.5 pounds to nearly 27 pounds between 1970 and 1995 (Miller). Consumption of carbonated soft drinks increased from 24.3 gallons per capita to 51.2.

Attempts to capitalize on consumer demand for healthier meal options have not always been successful. In 1991, McDonald's introduced the McLean Deluxe, which used a 91 percent fat-free beef patty formulated with carrageenan, a derivative of seaweed, but slow sales and poor public acceptance led to its demise after only a few years (Manchester). Taco Bell introduced a line of low-fat menu items in 1994, dubbed "Border Lights," but these were also largely abandoned due to slow sales. Consumers are not always willing to sacrifice the consistency and flavor that fat often contributes. Other low-fat items, such as the grilled chicken sandwich, have proven more successful and remain on the menus of most of the major hamburger chains. McDonald's version, introduced in 1994, contains only 4 grams of fat. Dieticians, nutritionists, and economists continue to debate the role that fast food plays in the health and well-being of United States consumers.

Food safety is also an issue. The large-scale production that characterizes the firms supplying the fast food industry, and the high volume of customer traffic through most fast food outlets, mean that a small amount of contamination at any point in the supply chain can severely disrupt production, consumer confidence, and possibly public health. The most recent example was the 25 million pounds of ground beef recalled by Hudson Foods in 1997, due to possible E. coli contamination. As a primary supplier to Burger King, as many as 25 percent of the nearly 7,800 outlets nationwide were left without hamburgers for 24 to 48 hours. In 1993, nearly 700 reported illnesses in the Pacific Northwest, and four children's deaths, were linked to undercooked hamburgers at Jack-in-the-Box fast food restaurants. This led to more stringent meat inspections, and emphasized the importance of accurate traceability of products over the supply chain to identify sources of contamination. Tight vertical linkages make it easier to trace the journey that food products made between the farm and the retail outlet, increasing the likelihood that contamination can be contained once identified.

#### The Future of the Industry

The United States economy is becoming increasingly service-oriented, and over the past several decades, the foodservice industries that offer the highest levels of convenience have been rewarded with strong sales growth. In the face of rising incomes and increasingly hectic work schedules, a nearly insatiable demand for convenience will continue to drive fast food sales. Firms will strive to find ways to make their products even more accessible. Many fast food outlets now have two or more drivethrough windows, and most firms have only scratched the surface when it comes to satellite outlets or other alternative points of distribution. Miniaturized outlets, even vending machines, offering hot fast food meals might one day be as common in public buildings as softdrink machines are today.

Even if incomes stagnate or attitudes change, consumers are unlikely to return to meal preparation at home on a large scale. Several studies have found not only a dramatic nationwide decline in time allocated to at-home meal preparation, but also a sharp decline in cooking knowledge, especially among young consumers (see Larson for a review). This suggests that even if consumers choose to spend more time at home, for family or other reasons, much of the meal preparation will still occur elsewhere. The market for Home Meal Replacements should remain strong, and firms that successfully mimic the quality and variety of home prepared meals will excel. Many more table service restaurants, which traditionally focus on full-service inhouse dining, will likely try to capture part of this market by offering take-out, and possibly experimenting with home delivery.

The value of consumer time, as well as the demand for consistent, high-quality food products, will continue to shape the food industry. Fast food, once considered a novelty, has become an increasingly significant part of the American diet. The role of convenience in this dietary shift cannot be over-emphasized, and the future growth of the rest of the foodservice industry will be driven in large part by its ability to find new ways to save consumers' time.

#### References

Clauson, Annette. "Food Market Indicators Briefing Room." USDA/ERS Homepage, <www.econ.ag.gov/briefing/foodmark> Jan. 1998.

Larson, Ronald B. "The Home Meal Replacement Opportunity: A Marketing Perspective." Working Paper 98-01, The Retail Food Industry Center, University of Minnesota, 1998. Lipton, Kathryn L., William Edmondson, and Alden Manchester. *The Food and Fiber System*. AIB-742, U.S. Dept. Agr., Econ. Res. Serv., 1998.

Lucier, Gary S., and Charles S. Plummer. *Potato Statistics*. U.S. Dept. Agr., Econ. Res. Serv., 1992.

Manchester, Alden. *Rearranging* the Economic Landscape—The Food Marketing Revolution, 1950-91. AER-660, U.S. Dept. Agr., Econ. Res. Serv., 1992.

Miller, James. *Dairy Yearbook*. U.S. Dept. Agr., Econ. Res. Serv., 1996.

McDonald's, Inc. *The Annual*. Annual Report to Shareholders, Oak Brook, IL. 1994.

National Restaurant Association. 1997 Restaurant Industry Operations Report. Washington, DC.

National Restaurant Association. *Foodservice Industry in Review.* various issues, Washington, DC.

Paul, Ron. "Supermarket Foodservice—A Wake-Up Call for Restaurants," *Technomic Foodservice Digest*. Technomic Information Services, Chicago IL. Aug. 1998.

United States Census Bureau. Census of Retail Trade Miscellaneous Subjects Series. 1992.