



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

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.

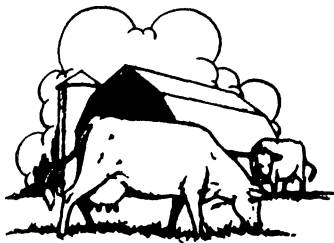
Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*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.*



MINNESOTA farm business NOTES



NO. 348

ST. PAUL CAMPUS, UNIVERSITY OF MINNESOTA

JULY 31, 1953

Can We Maintain the Demand for Food Products?

Willard W. Cochrane

There has been much talk about maintaining and expanding the demand for food products since farm prices began to fall about a year ago.

But what do we mean by demand? By demand we mean how much of a particular commodity, or group of commodities (such as milk or all food) that all folks in the market stand ready to buy at a particular price. And for any level of demand we expect buyers to take more of a commodity at a lower price, less of it at a higher price. Thus a change in price does not necessarily mean a change in demand.

What then is a change in demand? A change in demand occurs when buyers in a market take more (or less) of a commodity at a particular price.

One important factor leading to a change in demand is personal taste. If we learn to like a thing we try to buy more of it and conversely.

Another important factor is personal income. When incomes are rising demand generally increases and conversely. Prices of substitutes also influence demand; the quantity of pork taken at a particular price increases when the price, say of beef, increases.

Before tackling the problem of maintaining the demand for food products we need to be familiar with one or two more key ideas. It is a fact that the number of pounds of food consumed per person does not vary much as food prices or personal income vary. The human stomach is inelastic and so is the demand for total food.

We can and do vary the pounds of **different kinds** of food consumed as their prices vary. When, for example, the price of butter is high, consumers substitute margarine for it. Thus, where one food expands in consumption it generally comes at the expense of some other item.

When, however, personal incomes are rising, consumers pass by the

cheaper food items and increase their purchases of the more expensive items.

With rising incomes consumers eat more animal products and less corn meal, potatoes, and bread—they eat higher quality foods, not more pounds. This is the way the total demand for food expands in the United States.

The demand for food products increased greatly during World War II, held up strong during the first post-war years, slumped modestly in 1949 and '50, and then expanded again with the Korean fracas.

In large measure this long-run increase in demand for food grew out of increased personal incomes in the domestic economy. And the increased incomes grew out of: first, the war effort; second, the great plant, equipment, and housing boom after World War II; and then war mobilization again in 1950.

Effect of Exports on Demand

But there is another aspect of this demand for food products—it is the export demand. And here we must distinguish between **world needs** and **world demand**. World needs have been and will continue to be boundless. World demand, however, even with the financial aid of the United States, has taken less than 10 per cent of the total food production of the United States in any one year since 1940.

But this export demand has fluctuated considerably since 1940. And these fluctuations in foreign takings, superimposed upon a strong and growing demand for food products at home, has contributed to the sharp price level movements since World War II.

The drive to increase exports in 1947 and '48 helped push farm prices to a new peak in 1948. Farm prices tumbled down with the contraction in exports in 1949, shot up once again with increased exports in 1950, and came down with declining exports in 1952.

It appears that a strong domestic demand is not enough to maintain farm prices at high levels. A strong export demand is required too.

What actions might we wish to consider for maintaining and expanding the export demand for food products? The problem is certainly not one of need; the need for food is there. The problem is one of converting that need into effective demand. One route which lies open to us is a continuation and expansion of foreign aid programs—giving needy foreign peoples the dollars with which to buy U. S. food products. This may not be the happiest way, but it is one way.

This much is clear—if peoples in foreign lands are to buy our farm products they must have dollars. How can they get dollars if we don't give them to them? They can earn dollars by selling goods and services to us, and this they do in many lines. The more important include: coffee and tea, woolen textiles, wood pulp and paper, petroleum, non-ferrous metals, rubber, and sugar. But the fact remains that producers in other lands would like to sell more of their goods in this country—then use the dollars so earned to buy goods that are produced efficiently here. But our tariffs and import restrictions cut down the flow of exports by cutting down the flow of imports. Thus, a second line of action is suggested: reduce import restrictions in order to increase the total volume of trade. Wheat, cotton, pork products, tobacco, and dried fruits would certainly share in such an expansion of exports **providing that prices of these commodities are not seriously out of line.**

Maintaining Domestic Demand

To this point we have not considered the problem of maintaining domestic demand. But will the strong domestic demand based on high employment and

(Continued on page 3)

Wheat Crop Expected to Exceed Billion Bushels

Harold C. Pederson

More than a billion bushels of wheat a year have been produced in the United States in eight of the last nine years. The current year's crop is also expected to exceed a billion. These huge crops resulted mainly from increased acreages of hard red winter wheat and higher yields per acre (table 1).

The wheat acreage is concentrated mainly in the Central and Northern Great Plains and in the Pacific Northwest. Production here is highly mechanized. Rainfall is low and wide fluctuations in yields are not uncommon. Other areas capable of attaining high yields of wheat find competing crops and enterprises more profitable.

Exports Important

Wheat figures heavily in world trade. The United States is the largest producer of the four major exporting nations and on an average exports about one-third of the annual production. Canada's production averages around 4 hundred million bushels. Argentina's largest crops occasionally equal Canada's smaller ones. Australia produces less than Argentina.

Of special significance in recent years is the large share of the world's total exports supplied by the United States. These larger exports since 1940 are explained by war, lend-lease, Marshall Plan, and Mutual Security programs rather than representing normal trade.

In 1951-52, the United States' share of world trade exceeded 40 per cent compared with less than 10 per cent in most of the thirties and early forties. With domestic prices above world prices, the United States is finding it more difficult to export wheat.

Europe's Production Large

The countries of Europe, exclusive of the Soviet Union, generally produce more wheat than the United States. They are large importers, too. The decline in world trade in wheat during the twenties and thirties was a result of the upward trend in European production.

European production was noticeably downward during World War II, whereas, United States expanded production to meet European and world needs especially in the postwar period. Since 1946, Europe has made a marked recovery, however, and now is producing at the rate of 1.6 billion bushels a year. This rate of production is above the prewar average.

Variations By Regions

The hard winter wheat region has exceeded 30 million acres for nine consecutive years compared with 20 million acres a year in the early twenties. In 1949, more than 39 million acres were harvested.

The spring wheat region has maintained its place at or near 20 million acres a year; soft winter wheat has trended downward from 20.6 million acres in 1920 to 10.1 last year, whereas, the Pacific Northwest acreage has remained at 4 to 5 million acres.

Last Year's Yields Phenomenal

While yields have shown an upward trend over the past 30 years, those received in 1952 were phenomenal. This record yield coupled with a decrease in exports is mainly responsible for the reported near-record stocks of 575 million bushels of wheat on hand July

MINNESOTA farm business NOTES

Prepared by the Department of Agricultural Economics and Agricultural Extension Service.

Published by the University of Minnesota Agricultural Extension Service, Institute of Agriculture, St. Paul 1, Minnesota.

1 of this year in continental United States.

Minnesota Produces Less Wheat

Minnesota's trend in wheat production differs from that of the nation. Both acres harvested and total bushels produced have trended downwards (table 2). Yields per acre, however, have increased. The acreage and expected production of wheat harvested this year are among the lowest in 86 years.

Table 2. Minnesota: Acreage, Yield, and Production of Wheat, 1920-53*

Year(s)	Harvested acres	Yield per acre	Production
	thousands	bu.	thousand bu.
1920-29 av.	1953	13.1	25,532
1930-39 av.	1658	13.3	22,132
1940-44 av.	1291	17.4	22,533
1945-49 av.	1200	17.8	21,357
1950	927	16.7	15,512
1951	1076	18.6	20,022
1952	1155	14.7	16,998
1953†	1038	17.7	18,460

* Data for years 1920-48 adapted from *Fluctuations in Crops and Weather, 1866-1948*, USDA Statistical Bulletin 101, June 1951. *Minnesota State Farm Census* is source of data for years 1949-53.

† Preliminary estimates.

In Minnesota spring wheat consistently accounts for about 90 per cent of the acres from which wheat is harvested each year. Yields of winter wheat are higher, however, but this advantage is probably offset by some abandonment each year.

Durum wheat production has experienced the most drastic reduction of Minnesota wheats. The 1952 low figure of 32 thousand acres producing 384 thousand bushels raises a serious question concerning the future of this specialty crop.

The returns from alternatives coupled with continued progress in rust and disease control will determine the future of wheat in Minnesota.

Table 1. Wheat, All and Winter: Acreage, Yield, and Production, United States, 1920-1953*

Year(s)	All wheat			Winter wheat		
	Seeded acreage	Yield per acre	Production	Seeded acreage	Yield per acre	Production
	millions	bu.	million bu.	millions	bu.	million bu.
1920-24 av.	64.6	12.7	822	44.5	13.1	583
1925-29 av.	65.2	12.6	827	43.6	12.6	549
1930-34 av.	66.7	11.0	733	44.9	12.3	554
1935-39 av.	73.2	10.3	759	51.6	11.4	586
1940-44 av.	55.5	16.7	926	42.8	15.2	652
1945-49 av.	76.3	15.8	1,202	56.1	16.4	919
1950†	71.3	14.3	1,019	52.4	14.1	741
1951†	78.1	12.7	987	55.8	11.6	645
1952†	77.5	16.7	1,298	55.8	19.0	1,063
1953†	77.0	13.3	1,133	55.4	12.9	714

* *Agricultural Outlook Charts*, Bureau of Agricultural Economics, USDA, Washington, D.C., October 1952.

† Preliminary.

Modern Farmers Use Short-Term Credit

Reynold P. Dahl

In recent years farming has become increasingly commercialized. Farmers today buy more of the goods and services used in production than they did years ago. Substantial cash outlays must be made long before returns are realized. Here is where credit comes into the picture. Many farmers use short-term production credit to bridge the gap between cash outlays and the receipt of farm income.

The short-term debt of Minnesota farmers has more than doubled since the end of World War II. On July 1, 1952 the short-term farm debt held by the principal lending agencies totaled 181 million dollars. This expansion of credit has resulted from rising production costs and increased expenditures on machinery, equipment, and improvements for both farm and home.

There are three major lending agencies that supply farmers with short-term loans—banks, production credit associations, and the Farmers Home Administration.

Banks are the leading suppliers of this credit. Banks currently hold about 80 per cent of the short-term farm debt. The production credit associations have about 10 per cent.

The production credit associations were started back in 1933 as part of the Farm Credit Administration. To help start the PCA's the federal government provided the initial capital. They are organized on a cooperative basis. Active membership is based on the purchase of stock at the rate of 5 dollars for each 100 dollars borrowed. There are 21 PCA's in Minnesota of which 16 are completely farmer owned and farmer controlled.

The Farmers Home Administration is a governmental agency which lends public funds appropriated by Congress. This agency is a source of what might be called emergency credit. The Farmers Home Administration makes loans to farmers who cannot obtain production credit from other lending agencies and disaster loans in certain areas that have been hit by flood, drought, or other disasters.

Chattel mortgages are the most common form of collateral for these production loans. Through the chattel mortgage the farmer assigns such items as machinery, livestock, feed, etc., as security for the loan.

Another type of security that has

come into play, especially during the "tooling-up" period of our farms since the war, is the conditional sales contract.

Conditional sales contracts enable farmers to purchase farm machinery with a low down payment. However, farmers should understand that in the case payments are not met, the lender may repossess the machine without resorting to foreclosure.

Interest rates on short-term farm loans vary from 5 to 8 per cent, but the 6 and 7 per cent rates are the most common. There has been a tendency for interest rates to rise and credit to tighten up in the economy recently.

There has also been some stiffening in the interest rates that farmers pay including the rates charged on both farm real estate loans and short-term production loans. The rise in interest rates is an outgrowth of the policy of maintaining sound money and adding assurance that the threat of further inflation will be held in check.

In recent years there appears to have been some tendency for farmers to use short-term credit not only for production expenses, but also for major farm improvements. In a period of rising farm prices farmers have been able to repay these loans in a short period.

When farm income is less favorable, however, it may be well worth while to obtain a farm real estate loan to finance such improvements. Real estate loans typically carry a lower interest rate and can be repaid on a serial repayment basis over a period of years.

During the past year farmers have been faced with a cost-price squeeze. As of April 15, 1952 the parity ratio, that is, the ratio of prices received by farmers to prices paid by them stood at 100. On April 15, 1953 the parity ratio was 93, the lowest since June 1941.

This decline is especially significant when considered in the light of the increased cash expenses involved in modern farming. In such a period it is particularly important for farmers to watch the magnitude of their debts.

The large investment in machinery and equipment on modern farms results in a heavy annual depreciation. Although farmers generally recognize that machinery wears out, relatively few regard this depreciation as a charge against current income. As a result, many consider that all of their cash receipts are available for current living. However, depreciation reserves must

be provided if the farmer is to make replacements as needed.

Depreciation reserves need not necessarily be held in the form of cash; they may be invested in earnings assets such as livestock. However, if agricultural cost-price relationships continue to become less favorable, farmers may find it advisable to hold such a reserve in a bank account or United States Bonds. If this course is followed, such funds would be readily available if needed. Also, if prices go down such reserves will gain in purchasing power.

On the whole, the current financial condition of agriculture is satisfactory, that is, the volume of debt is not high in relation to the value of farm assets. Farmers will continue to require large amounts of short-term credit to finance their farm business.

However, farmers should remember that short-term loans must be paid out of current farm income. Therefore, the prudent farmer will gear his borrowings to the income-earning capacity of his farm business.

(Continued from page 1)

high incomes roll on through the 1950's without a fall?

A great deal depends on whether we have war or peace, but some ups and downs in employment and personal incomes would seem probable. And since employment is the major determinant of the domestic demand for food products, we would expect to see those ups and downs bring some changes in the demand for food products.

A 5 per cent change in the quantity of food demanded can result in a 25 per cent change in the level of food prices at the farm level.

It is clear that the domestic demand for farm products cannot be maintained through some gadget or two. The source of domestic demand is to be found in urban employment and the maintenance of demand for farm products rests in the maintenance of urban employment. Programs to maintain the domestic demand for food thus turn out to be programs for maintaining employment.

Special feeding programs such as the School Lunch Program, Penny Milk Program, and Food Stamp Plan can help maintain demand and should be used. But they do not contribute to a fat pay envelope—the source out of which workers increase their takings of animal products and fresh fruits and vegetables. A strong and expanding domestic demand for food products derives out of the full employment that we have witnessed the past ten years.

Minnesota Farm Prices, *The Outlook Corner*-Corn Situation May-June 1953

Prepared by Jerry M. Law

Average Farm Prices for Minnesota, May and June, 1953, With Comparisons*

	May 1953	May 1952	June 1953	June 1952
Wheat	\$ 2.18	\$ 2.13	\$ 2.11	\$ 2.13
Corn	1.34	1.48	1.30	1.56
Oats	.68	.75	.65	.73
Barley	1.21	1.17	1.14	1.15
Rye	1.31	1.68	1.18	1.79
Flax	3.47	3.67	3.35	3.72
Potatoes	1.00	2.40	1.00	4.00
Hay	16.20	14.30	15.80	14.00
Hogs	22.60	20.00	21.90	18.70
Cattle	16.60	27.60	17.60	27.10
Calves	21.70	31.80	18.70	30.80
Lambs-sheep	21.23	24.71	20.13	24.30
Chickens	.235	.176	.198	.177
Eggs	.415	.299	.425	.305
Butterfat	.71	.77	.71	.77
Milk	3.30	3.65	3.25	3.60
Wool†	.50	.46	.50	.48

* Average prices as reported by the USDA.

† Not included in the index numbers given below for Minnesota.

The index of Minnesota farm prices represents the average of the increases and decreases in farm product prices in the given month of 1953 over the average of the five corresponding months of the period 1935-39. Weights for the Minnesota indexes are the average sales in the five corresponding months of 1935-39. Weights for the U. S. indexes are the average sales of 60 months in 1935-39.

Prices received by Minnesota farmers averaged lower in June than in the previous month. Notable declines were for sheep, calves, chickens, and rye. Prices this June also averaged lower than June of last year. Most significant declines were for cattle, calves, sheep, and potatoes.

Indexes and Ratios for Minnesota Agriculture

	May 1953	Average May 1935-39	June 1953	Average June 1935-39
U. S. farm price index	245.3	100	245.7	100
Minnesota farm price index	246.2	100	249.8	100
Minn. crop price index	221.4	100	229.5	100
Minn. livestock price index	262.3	100	257.4	100
Minn. livestock products price index	241.7	100	248.7	100
Purchasing power of farm products				
United States	110.1	100	112.1	100
Minnesota	111.1	100	113.9	100
Minn. farmers' share of consumers' food dollar	57.8*	46.3	57.8†	45.5
U. S. hog-corn ratio	15.5	10.7	15.6	12.0
Minn. hog-corn ratio	16.9	14.6	16.9	15.2
Minn. beef-corn ratio	12.4	12.7	13.5	12.8
Minn. egg-grain ratio	14.6	14.6	15.5	14.6
Minn. butterfat-farm-grain ratio	31.0	29.7	32.4	30.9

* Figure for February

† Figure for March

The corn carry-over on October 1 will be about 800 million bushels. This is near a record. October 1 carry-overs in past years have been:

	million bushels
1937-41 average	469
1949	813
1950	845
1951	739
1952	486

The 1953 corn crop is still a big question. Early season weather conditions are favorable. We could have a crop equal to 1952. If so, what will happen to supplies? Several factors affect it.

Production for the last five years has averaged 3.2 billion bushels. The expected carry-over this fall is equal to one-fourth of this production, or enough to carry us for three months. A small variation in production will have a strong effect on the carry-over and on market prices.

Almost 90 per cent of this corn is used for feed. During the past five years 8 per cent was used for industrial purposes and for food; another 3 per cent was exported. We must therefore look at prospective feed consumption when we try to anticipate changes in the corn situation.

We must, however, look at other feed grains as well, since they substitute for corn. The kinds of feed grains used during the last five years were:

	per cent
Corn	60
Oats	16
Barley and grain sorghums	5
Wheat and rye	2
Oilseed and cake	6
Animal protein feeds	2
Other by-product feeds	9

Corn makes up more than one-half of these feed grains. Corn and oats together make up 76 per cent. They also vary more widely in production from year to year than do the other feeds. Corn supplies must then be studied in relation to oats production.

The corn is fed to these classes of livestock:

	per cent
Hogs	53
Poultry	20
Beef cattle	10
Dairy cattle	9
Other livestock	8

Hogs and poultry use most of the corn. These also are the classes of livestock that fluctuate most widely in numbers from year to year.

These last figures are the best available estimate for the last three years. During these years hog production was the largest in our history, except for 1943. Dairy cows were 10-15 per cent below peak numbers, and equal to the number in the thirties. Beef cows were at a peak—about double the number in the thirties.

Summary: Corn supplies are high. We have fairly good prospects for a big crop in 1953, although that can change quickly. Most of the corn is fed, particularly to hogs and poultry. The 1953 pig crop is smaller than 1952. We can, therefore, expect that less corn will be fed next year than during the current feeding year.

UNIVERSITY OF MINNESOTA, INSTITUTE OF AGRICULTURE, ST. PAUL 1, MINN.

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and United States Department of Agriculture Co-operating, Paul E. Miller, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

UNIVERSITY OF MINNESOTA
Institute of Agriculture
Agricultural Extension
St. Paul 1, Minn.

PAUL E. MILLER, Director
Minn. 7-7-53-3 M
Permit No. 1201

PENALTY FOR PRIVATE
USE TO AVOID PAY-
MENT OF POSTAGE, \$300

FREE—Cooperative Agricultural Extension
Work, Acts of May 8 and June 30, 1914.