

WHEAT Situation



Table 1.--Wheat: Supply, distribution and prices, total and by class
July-June average 1965-69 and annual 1972-75 1/

Item and Year	Average 1965-69	1972/73	1973/74 preliminary	1974/75 forecast	1975/76 projected
----- Million bushels -----					
Beginning carryover	626	863	3/438	247	319
Production	1,426	1,545	1,705	1,793	2,187
Imports 2/	2	1	4	2	1
Total supply	2,054	2,409	2,147	2,042	2,507
Food 4/	515	528	528	525	525
Seed	65	67	84	87	84
Feed (residual) 5/	128	190	140	72	200-175
On farms where grown	(46)	(47)	(31)	(34)	
Domestic disappearance	*709	785	752	684	809-784
Exports 2/	705	1,186	1,148	1,039	1,050-1,200
Total disappearance	1,414	1,971	1,900	1,723	1,859-1,984
Ending carryover	640	438	247	319	648-523
Privately owned--"Free"	(194)	(227)	(228)	(317)	
----- Dollars per bushel -----					
Price Support					
National average loan rate	1.25	1.25	1.25	1.37	1.37
Average certificate payment	.54	.47	.21		
Season Average Price Received					
By non-participants	1.37	1.76	3.95	4.04	
By program participants 6/	1.91	2.23	4.16	4.04	
----- Million bushels -----					
	Hard winter	Red winter	Hard spring 7/	Durum 7/	White 7/
----- Million bushels -----					
1972/73					
Beginning carryover	471	18	275	69	30
Production	761	226	276	73	209
Total supply	1,232	244	552	142	239
Domestic disappearance	327	168	181	40	69
Exports 2/	704	68	198	65	151
Total disappearance	1,031	236	379	105	220
1973/74					
Beginning carryover	201	8	173	37	19
Production	957	159	328	79	182
Total supply	1,158	167	503	117	202
Domestic disappearance	301	133	209	47	62
Exports 2/	731	25	228	42	122
Total disappearance	1,032	158	437	89	184
1974/75					
Beginning carryover	126	9	66	28	18
Production	879	290	290	79	255
Total supply	1,005	299	357	108	273
Domestic disappearance	305	137	159	38	45
Exports 2/	518	144	130	49	198
Total disappearance	823	281	289	87	243
1975/76					
Beginning carryover	182	18	68	21	30
Production	1,046	347	388	133	273
Total supply	1,228	365	457	154	303
Domestic disappearance	349	187	168	40	53
Available for export or carryover	879	178	289	114	250

1/ Data by class, except production, are approximations. Projected disappearance figures should be regarded as midpoint of estimated ranges. 2/ Imports and exports include flour and other products in terms of wheat. 3/ Excludes grain in transit, the volume of which was abnormally large as of the survey date. 4/ Used for food in the United States, U.S. territories, and by the military at home and abroad. 5/ Residual; approximates feed use and includes negligible quantities used for distilled spirits and beer. 6/ Does not include set-aside or disaster payments. 7/ Total supply includes imports.

*Totals may not add due to rounding.

THE WHEAT SITUATION

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Even with some increase in domestic use and assuming that exports reach the high end of our projections, total use of U.S. wheat in 1975/76 likely will fall short of the 2.2 billion bushel crop that is being harvested. Thus, 1975/76 will be a year for stock rebuilding.

The 1975 wheat crop estimate, as of July 1, is a record shattering 2.2 billion bushels, 22% larger than last year's record. This does not take into account any flood damage to the spring wheat crops in North Dakota and Minnesota. After a slow start in the South, the pace of harvest quickened as combines moved northward, harvesting another record winter wheat crop. Yields in most regions are expected to be above last year's weather-reduced levels and the total harvested area is the largest since 1952. Stocks of old crop wheat on July 1 totaled 319 million bushels, up 72 million from last year's 26-year low. On the strength of the record crop, 1975/76 wheat supplies will climb to over 2.5 billion bushels.

After a turndown last year, wheat disappearance is expected to climb in 1975/76. Domestic use is expected to increase largely because of more wheat feeding, with the extent of the gain dependent on future price relationships between wheat and feed grains. Wheat prices at early harvest were favorable for feeding but this changed quickly in July.

Deteriorating crop prospects in the Soviet Union and continued strong import demand in other regions point to U.S. exports of over a billion bushels for the fourth consecutive year. It appears that U.S. exports in 1975/76 could approach 1.2 billion bushels, compared with 1,039 million last season. Soviet purchases of U.S. wheat reported thus far this season total 4.2 million metric tons (154 million bushels); about 800,000 tons are scheduled for 1976/77 delivery. Export commitments already show around 400 million bushels of wheat sales, with India and the USSR accounting for over two-thirds of the total. The Soviets have also purchased 3 million tons of wheat from Canada and 750,000 from Australia.

Domestic use in 1975/76 will depend partly on the strength of foreign demand. Larger exports and stronger prices would tend to restrict domestic use, particularly for feed. Even with some increase in domestic use and exports, total disappearance will

likely fall short of the 2.2 billion bushel crop so that 1975/76 will be a stock rebuilding year.

As the season opened, wheat prices were nearly a dollar below the average of the last 2 years. After moving down at harvest, wheat prices rose sharply in July on the strength of foreign purchases and speculation about larger sales to the USSR. Market prices for the rest of the year will be heavily dependent on the ultimate size of the U.S. and world grain crops and the size and pattern of export shipments.

Weather has been mixed over the world's wheat belt with droughts and floods cutting into early prospects of a bin filling harvest. Still the 1975 world wheat crop, estimated at around 360 million tons, is up a little from a year ago. Substantial increases are expected in Canada, Argentina, India, and the United States, while Australia and Eastern and Western Europe will have smaller crops. In the Soviet Union's spring wheat areas, continuing dry weather into July brought a further reduction in wheat crop prospects to 85 million tons, about the same level as last year. World wheat trade for 1975/76 is projected at about 72 million tons, 3 million higher than a year ago and close to the 1972/73 record. Highlighting early season trade is the sharp jump in USSR imports from 2.5 million tons last season to perhaps 10 million for 1975/76. As of July 24, the Soviets had purchased about 8 million tons of wheat. If projected trade approaches the 1972/73 record, world wheat stocks will remain relatively tight at season's end.

Hard Red Winter (HRW): The 1975 HRW crop appears to have broken the billion bushel barrier. Unfortunately, larger than usual amounts appear to be grading yellow hard, generally a lower protein subclass. Domestic demand is likely to pick up on the strength of expanded wheat feeding while mill grind may hold near last year's level. The quantity available for export or carryover is up sharply; early

indications suggest that exports could be well above last year's 518 million bushels.

Soft Red Winter (SRW): A simple way to describe the 1975 SRW crop is huge. At 347 million bushels, it is 20% above a year ago. Demand is expected to be large again this year because of heavier feeding and perhaps some recovery in mill grind. About 180 million bushels will be available for export and carryover. Exports will be a big uncertainty. Through mid-July, sales reports showed around 50 million bushels. SRW could get intense price competition from yellow hard for lower protein wheat import markets this year.

Hard Red Spring (HRS): Prior to the Red River Valley flooding, the HRS crop was estimated at 388 million bushels, up a third from last year's poor harvest. Stocks as of July 1 were basically unchanged from a year ago but with the sharply larger crop, total 1975/76 supplies will be up a fourth. The demand for HRS this year will hinge on the quality of our HRW crop and the quality and size of the Canadian spring wheat crop. Even if domestic demand holds near the 1974/75 level, the quantity available for either export or carryover at 290 million bushels will be almost 50% above a year ago.

Durum: Acreage planted to durum this spring jumped 13% and with better yield prospects, the durum crop estimate before the Red River Valley flood soared to 133 million bushels. Durum supplies likely will climb by a third to around 150 million bushels. Domestic use for durum slumped during 1974/75 as users shifted to a higher ratio of farina, replacing higher priced semolina. If durum is cheaper relative to hard wheats, then there may be some recovery in food use in 1975/76. The quantity of durum available for export and carryover this year will climb to over 100 million bushels. Sales prospects do not appear bright enough to prevent some building of durum stocks this year.

OUTLOOK FOR 1975/76

Wheat Crop Shatters Record

The 1975 wheat crop, was estimated at a record shattering 2.2 billion bushels as of July 1, 22% larger than last year's record.¹ A decade ago U.S. growers were producing around 1.3 billion bushels of wheat and 50 years ago the crop totaled around 650 million. So, as the popular saying goes, we've come a long way. A good part of this year's increased production can be attributed to the largest plantings in over 20 years, stemming from high wheat prices, prospects for continued strong wheat demand, and an open-

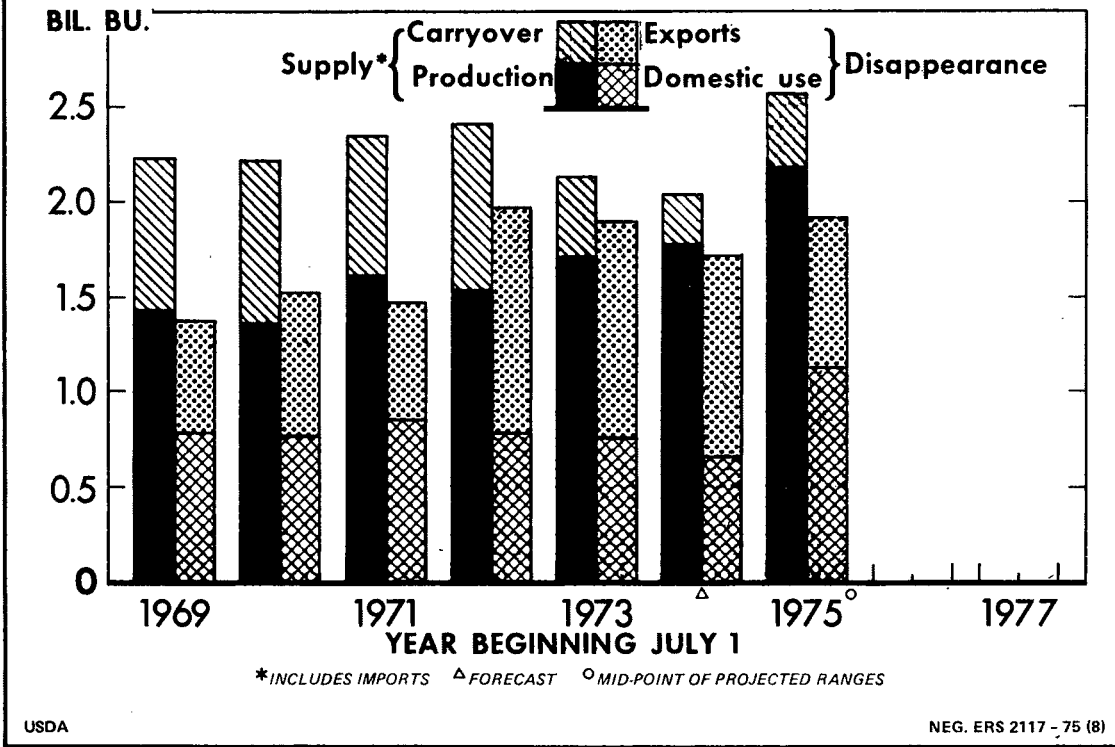
ended wheat program. The 74.4 million acres seeded was 5% higher than even last year's large total. Farmers recently indicated that they will harvest slightly over 69 million acres for grain. In most areas, 1975 wheat yields are running at or above last year's weather-reduced levels. Yields across the entire wheat producing area may average around 32 bushels per harvested acre, a 16% increase from a year ago but still below 1971's record 33.9 bushels.

Winter wheat production, if it holds at 1.6 billion bushels, would register the fifth consecutive yearly increase. Crop maturity and harvest were lagging but ideal weather in early July caused the pace of harvest to speed up and by month's end 80% of the winter crop was in.

There are still some questions about the spring wheat crop. Durum wheat producers, reacting to

¹This estimate did not take into account the effects of the severe flooding in the Red River Valley of North Dakota and Minnesota in late June and early July.

WHEAT SUPPLY AND DISAPPEARANCE



Wheat: U.S. planted and harvested acreage

Class	Planted		Harvested		Percent harvested	
	1974	1975 ¹	1974	1975 ¹	1974	1975 ¹
	Million acres		Million acres		Percent	
Winter	52.4	55.8	47.1	50.9	89.9	91.1
Durum	4.1	4.6	4.0	4.5	98.2	98.2
Other						
Spring	14.7	14.0	14.3	13.6	97.6	97.7
Total ...	71.2	74.4	65.4	69.0	92.0	92.8

¹ Preliminary.

continuing strong prices, seeded 4.6 million acres, over 50% larger than plantings just 2 years ago. Most of the increase was in North Dakota, the No. 1 durum producer. However, spring wheat acreage other than durum slipped 5% from a year ago. A number of factors may have contributed to the decline, including the 13% increase in durum acreage, 5% more barley, and 7% more winter wheat.

Recent developments may result in somewhat greater abandonment and possibly lower yields in the spring wheat area than indicated in the July Crop Production report. Almost 98% of the 18.6 million acres was expected to be harvested, but the floods may increase the rate of abandonment. However, this

same weather provided needed moisture elsewhere and probably had some offsetting effects on yields.

Stocks Up But Still Low

Stocks of old crop wheat on July 1 totaled 319 million bushels, up 72 million bushels from last year's 26-year low. Farmers held about 40% of the total on the farm. In sharp contrast with years gone by, when the Commodity Credit Corporation (CCC) held most of the off-farm stocks, CCC owned little of the July 1 inventory. Much of the old crop wheat was still being held in the principal producing areas of the Central and Northern Plains.

Wheat Supplies Largest Since 1961/62

On the strength of a record crop and a larger carryover, 1975/76 wheat supplies will climb to over 2.5 billion bushels, the largest since the record supply years of the early 1960's when carryovers were over a billion bushels and allotments controlled acreage planted to wheat. In contrast, this year's large supply is built on a large crop without planting limitations. Record crop forecasts for each wheat class have sharply altered the supply situation for some classes. (See "Wheat Outlook by Class").

With the government out of grain stocks and the trade holding little more than its pipeline needs, markets will be especially sensitive to farmers'

selling strategies. The past 2 years have seen grain farmers marketing relatively less at harvesttime. This "orderly marketing" pattern has permitted farmers to spread their income flow and also take advantage of post-harvest price increases. Early signs would indicate that farmers are in no hurry to market the 1975 crop.

Strong Demand Picture Takes Focus

After last year's downturn, demand is expected to climb in 1975/76. Domestic use of wheat in 1974/75 slipped to the lowest level since 1967/68. Exports, although large, eased from the levels of the 2 preceding years. Wheat food use has been estimated at 525 million bushels, the same as a year ago but below the level of the 2 preceding years.

Wheat feeding is the big question mark on the domestic scene. Placements of cattle on feed have gained recently but recovery is lagging in some of the major wheat producing and feeding States. Prices for early new crop wheat became very competitive with grain sorghum in the Central and Southern Plains and with corn in the Southeast. However, the sensitivity of the wheat market to export developments and the resulting wheat price increases in mid-July has discouraged feeders from including wheat in their rations. If prospects for a huge feed grain crop materialize, large feed grain supplies will tend to limit wheat feeding later this year. However, there is a larger than normal supply of yellow hard winter wheat, which has been severely discounted, and a huge soft red winter wheat crop. The feed deficit areas of the Eastern United States have historically fed wheat, the amount generally depending on the prices and availabilities of wheat and other grains. Relatively tight supplies of feed grains during July-September would indicate a pickup in SRW feed use. The extent of wheat feeding in the Central and Southern Plains will depend on whether the large quantity of yellow hard is absorbed by the export market or whether it backs up in the domestic market. Total wheat feeding in 1975/76 may more than double last season's 70 million bushels, with the bulk being fed during July-September.

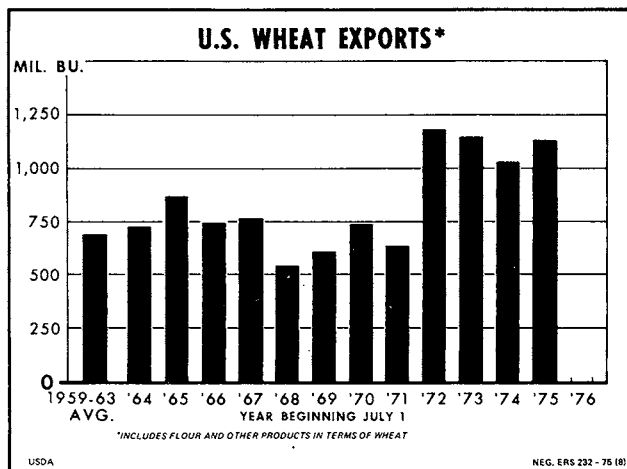
Farm price differentials and wheat fed, 1966-73

Crop year	Wheat over corn July-Sept.	Wheat fed July-Sept.	Total fed July-June
	Dol. per cut.	Mil. bu.	Mil. bu.
1966/67	+0.51	11	94
1967/68	+0.27	15	43
1968/69	+0.20	122	155
1969/70	-0.11	110	195
1970/71	-0.12	122	187
1971/72	-0.03	152	266
1972/73	+0.44	168	190
1973/74	+2.33	134	140
1974/75	+1.30	59	72

Another Billion Plus Export Year²

A continued strong demand for wheat and recent downward revisions in the 1975 world wheat crop suggest another banner year for U.S. wheat exports. The USSR, Australia, Eastern Europe, and the European Community accounted for most of the cut.

World trade in wheat is expected to continue heavy in 1975/76, totaling around 72 million tons compared with last year's 68.5 million. The U.S. share of this market will depend on the supplies available from our export competitors and their export sales policies.



Early indicators of U.S. exports give a few hints of what's ahead. As of late July apparent export commitments totaled around 400 million bushels with India and the USSR accounting for over two-thirds of the sales. About 60 million bushels of outstanding sales at the end of 1974/75 were carried forward into this season. Since the first of July, the USSR has purchased 4.2 million tons of U.S. wheat and 3 million tons of Canadian wheat. About 800,000 tons of the U.S. sale is for delivery in 1976/77. Thus far the large Soviet purchases have not triggered frantic buying on the part of other foreign buyers and the world's wheat importers appear to be practicing "orderly buying."

It appears that U.S. exports in 1975/76 could range from slightly over a billion bushels to 1.2-billion. Larger exports would boost prices, limiting feeding and the amount of stock buildup. But even with some expected increases in exports and wheat feeding, total disappearance will likely fall short of the 2.2 billion bushel crop. This could result in a rebuilding of stocks, perhaps to levels nearly double this summers 319 million bushels.

² For additional details on the world situation and USSR grain purchases, see the World Wheat Situation (page 11).

In late July the USDA announced that in view of the large U.S.S.R. grain import requirements, it had asked export firms to advise the Department before beginning negotiations of large export sales of grain.

Will Prices Follow 1974/75 Pattern?

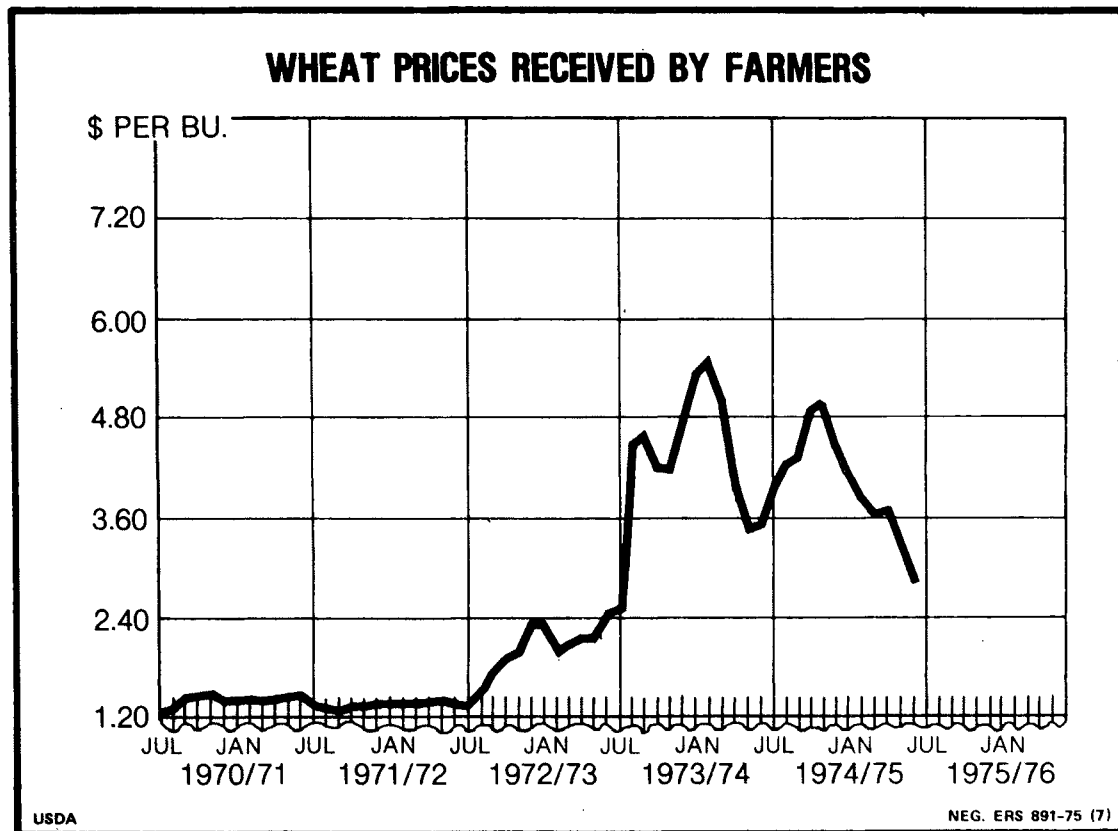
During late June and early July wheat prices moved down in what appeared to be a normal seasonal pattern. Hard red winter at Kansas City was relatively stable at around the \$3 per bushel level. Soft red winter had eased below \$3, while white wheat and the spring wheats were still adjusting downward in anticipation of forthcoming harvests. Rumors of large sales to the USSR, which precipitated speculative buying in addition to the usual early season demand, added a quick 20 to 25% to wheat prices at most markets. After confirmation of U.S., Canadian and Australian sales to the USSR, markets eased off slightly but strengthened again on news of deteriorating crop prospects in the USSR and possible problems with the U.S. corn crop.

Whether markets follow a contra-seasonal pattern as they did last year or a more normal seasonal pattern will depend on the size of the U.S. wheat and feed grain crops and the size and pattern of export

Wheat: Prices received by farmers in selected States

States	May		June		July	
	1974	1975	1974	1975	1974	1975
	<i>Dollars per bushel</i>					
Texas	3.24	3.13	3.43	2.87	3.98	3.42
Oklahoma . . .	3.33	3.11	3.48	2.87	4.07	3.39
Kansas	3.20	3.02	3.44	2.76	3.96	3.38
Illinois	3.24	2.97	3.43	2.77	4.06	3.16
Missouri	3.28	2.93	3.42	2.72	3.95	3.22

shipments. The latter will be dependant upon world crop prospects and import requirements for 1975/76. Uncertainty will continue until the Southern Hemisphere crops are in the bin. If crop prospects in the USSR and some of the other major producing countries continue to deteriorate, U.S. wheat prices could average at or above current levels. If crop conditions should hold and world grain supplies not tighten further, prospective buildups in U.S. wheat and corn stocks could bring pressure to bear on prices later in the year. In this case, it appears that the price to wheat farmers in 1975/76 could average below the levels of the past 2 years.



WHEAT OUTLOOK BY CLASS

Record HRW Crop Likely

The 1975 Hard Red Winter (HRW) wheat crop appears to have finally broken the billion bushel barrier. As of July 1, it was estimated at a record 1,046 million bushels, 9% above the previous high set in 1973. Production in Kansas, the major HRW producer, will be up around a tenth but will still fall well short of the fabled "400 million" bushel level. But sharply larger crops in Oklahoma, Texas, and Montana were enough to boost HRW to a new high.

Acreage planted to HRW last fall was up 5%. Dryness plagued some parts of the Central Plains area, but in general the growing season was fairly good. Yields in most States are up from last year's poor levels, but still short of the highs of 1973.

Another real HRW news development is the unusually large amount of the 1975 crop that is grading "Yellow Hard" and the market discount it is taking. HRW is graded Dark Hard if it has 75% or more dark vitreous kernels; Hard with 40% up to 75% dark vitreous kernels; and Yellow Hard below 40% dark hard vitreous kernels. Excessive moisture during the dough stage was probably the principal factor contributing to the increase in yellow hard in this year's crop. Yellow hard is generally associated with lower protein, but the actual protein content of the yellow hard would be a better measure of its quality than only the count of yellow kernels.

Total supplies of HRW will climb to 1.2 billion bushels, over 20% above a year ago. Lagging year end exports resulted in a somewhat better stock position than anticipated: stocks rose to around 180 million bushels from 125 million a year earlier.

Domestic demand for HRW is likely to pick up in 1975/76. The quantity of HRW used by the milling industry and feeders will depend on the disposition of the large quantities of yellow hard. If there is weak export demand for yellow hard and domestic millers continue to discount it heavily, then feeding could be a possible outlet. But if the yellow hard is exported or is high enough in protein content to be used in blends, feed use of HRW may show only a moderate expansion. In any case, yellow hard could account for a large part of this year's carryout. Mill grind of HRW may not be much different from last year's heavy level. The fact that this year's HRW supplies are almost a billion bushels larger than typical mill needs should help the industry find the quality of wheat that it needs. Early indications suggest that the average protein of the 1975 HRW crop may be off for the third year in a row.

If estimates of domestic use hold up, 1975/76 could see a disappearance of around 350 million bushels. This would leave less than 900 million bushels available for export and carryover. As of mid-July, USDA's export sales report showed around 200

million bushels on the books. This is up from the same period a year ago but still well below the 619 million bushels posted in mid-July 1973. Recent sales to the USSR could push exports above last year's 520 million bushels. But exports would have to approach the 700 million bushel levels of 1972/73 and 1973/74 in order to prevent a buildup in yearend stocks of HRW.

During early July, HRW at Kansas City had settled to around \$3 per bushel. But rumors of large sales to the USSR and later confirmations added 20% to 25% to wheat prices in a 2-week period. Thirteen-percent protein HRW continues to command a substantial premium over ordinaries, while at the other end of the scale wheat grading yellow hard has been drawing heavier than usual discounts, in some cases over 20 cents per bushel.

Soft Red Winter Supplies Huge

An acreage increase of 5-10% and yields in some States of over 40 bushels per harvested acre are pushing the Soft Red Winter (SRW) wheat crop to a record 347 million bushels. This is in sharp contrast to the situation in the not too distant past when there was discussion among the industry that eastern soft wheats should be included on the "endangered species" list.

Stocks of SRW continue near minimum levels so 1975/76 supplies of 365 million bushels are built mainly of this year's production.

Demand is expected to be heavy this year. Large SRW supplies in the feed deficit areas of the South and Southeast should provide an ample reservoir from which feed ingredients can be drawn. Other areas in the East may also see some SRW fed between now and the new crop corn harvest. Not as much of this year's SRW crop is grading garlicky as a year ago so discounts are less.

The slump that hit the soft wheat milling industry last year as consumers showed resistance to high bakery product prices should not recur this year. Lower ingredient prices have already led to reduced retail prices. Retail sales are expected to recover some, although as yet there is not much evidence to support an increase in mill grind of SRW.

Exports will again be a big uncertainty. Nearly 180 million bushels of SRW will be available for export and carryover. Through mid-July outstanding sales reports showed 60 million bushels on the books. This compares with 90 million for the same data a year ago. Last year the Peoples Republic of China (PRC) bought 47 million bushels but a repeat sale of this size seems unlikely. In the past, importers have shifted to SRW because it was the cheapest wheat but this year the large supplies of yellow hard (HRW) could offer stiff price competition in many of these markets.

Because of traditional price patterns and the historic unwillingness of the soft wheat industry to carry large stocks, it would still seem likely that over the year SRW would be priced competitively with other wheats for export.

As the harvest moved northward into the major producing areas, SRW prices at major markets dropped below \$3 per bushel, but then advanced to over \$3.50 as the large wheat sales to the USSR developed.

Spring Wheat Supplies Up Sharply

The 1975 Hard Red Spring (HRS) wheat crop was estimated at 388 million bushels on July 1. Just a year ago the 1974 crop was estimated at 390 million but delayed plantings, dry weather, and early frost knocked a hundred million bushels off by the time the crop was harvested. Problems this year haven't been as severe. Torrential rains did hit the southern part of the Red River Valley in North Dakota and Minnesota in late June. Counties affected accounted for about 30% of North Dakota's acreage and 20% of Minnesota's acreage. However, the extent of flooding varied widely by county. While the heavy rains may result in some additional abandonment of acreage, this could be partly offset by the positive affect on yields of increased moisture.

Stocks of HRS on July 1, at around 70 million bushels, were unchanged from a year ago, but with the sharply larger crop total supplies will increase over a fourth.

The important question this year is how strong will demand for protein be? A fall in the protein content of the HRW crop the past 2 years has required more HRS for blending. This year appears to be another low protein year for HRW, so it would seem that the domestic demand for HRS could continue strong.

The quantity of HRS available for either export or carryover at 290 million bushels is about 50% above a year ago. Are the markets there? Through mid-July only around 30 million bushels were outstanding on the export books. This compares with total exports of 130 million bushels during 1974/75. The level of U.S. exports this year will depend on the quality and size of the Canadian crop and whether some importing countries substitute HRS for winter wheats if protein winters are in short supply.

As it became apparent in June that the quality of the new crop winter wheats could again be low, prices of spring wheats at most markets strengthened relative to winters. Like other wheat classes, HRS prices reacted to the rumors of USSR wheat sales, topping the \$4.00 a bushel level at Minneapolis in mid-July.

Durum Crop Up Sharply

Acreage planted to durum increased 13% this year to almost 4.6 million, the largest since 1930. Exceptionally strong prices plus a reasonably good

planting season, once the rains stopped, encouraged farmers to add to durum acreage. However, there was some flood damage in the lower Red River Valley area of Minnesota and North Dakota during late June, but the extent of flooding varied considerably by county. Counties affected accounted for about 11% of the North Dakota acreage and 40% of the Minnesota acreage. Some durum acreage could be abandoned but the rains could even improve yield prospects elsewhere.

The 1975 harvest was estimated at 133 million bushels as of July 1. This all-time record harvest would be 68% larger than last year's weather-reduced crop.

Last year, heavy export demand resulted in durum stocks on July 1, 1975 slipping to around 20 million bushels. But when combined with the huge 1975 crop, 1975/76 supplies will climb to around 150 million bushels, over a third larger than a year ago.

Domestic demand for durum slumped during 1974/75 as mill grind fell from recent historic highs. High durum prices relative to those of other wheat classes encouraged the substitution of other flour for semolina in the manufacture of pasta products. Consequently, at a time when pasta consumption appeared to be going up, the consumption of semolina, the mainstay of the pasta industry, was going down. Whether domestic mill grind of durum recovers in 1975/76 will depend in large part on durum's price competitiveness with other wheat classes.

The quantity of durum available for export and carryover this year will climb to over 100 million bushels. The world market for durum is not especially large and any increase in our sales over this past year's 49 million bushels would likely have to be made at the expense of other exporting countries.

In late June and early July, when some wheats had fallen to around \$3 per bushel, No. 1 Hard Amber Durum at Minneapolis was still commanding over \$5. Durum prices rose some on the basis of the USSR sales but the potential large supply may have moderated the price increase for durum.

Big Supplies of White Wheat

After a somewhat shaky start, the white wheat crop has come on strong and it now appears that a harvest of over 270 million bushels is possible, 7% above 1974. Around 30 million bushels would come from New York and Michigan. Planted acreage was off some but yield prospects in all the major producing States appear to be at or above recent highs. As usual, Washington will lead the way with a harvest of over 100 million bushels. The Pacific Northwest which also includes Oregon and Northern Idaho could produce around 180 million bushels.

The total supply will approach 300 million bushels this year, one of the largest on record. Beginning stocks are a third larger than last year's.

Domestic use likely will show little improvement from last year's 53 million bushels. Both wheat feeding and mill grind of white wheat should continue near recent levels.

With no expansion in domestic use and a larger supply, the quantity available for export and carryover will be one of the largest in years. An availability of around 240 million bushels means that 1975/76 exports sales will have to be maintained at last year's high level in order to prevent a sharp increase in white wheat stocks by next summer.

White wheat prices were holding above the \$3 level through late June and followed the recent upsurge in wheat markets.

Bread Prices Down; Spread Up

The bread story thus far in 1975 is that prices have followed the downtrend of farm ingredients. The average retail price of a 1-pound loaf of white bread, at 35.6 cents in June, was nearly 2 cents a loaf less than the record high of February. At the same time, the value of farm ingredients in that loaf declined by over 2 cents.

These 2 trends led to an increase of 0.7 cent in the farm-retail spread to a total of 30 cents a loaf. The retail spread has slipped during the year while the baker-wholesaler spread increased sharply. The net result was that the farmer's share of a loaf has dropped from a fifth to about 16%.

White pan bread: Prices, spreads, and farm value per 1-pound loaf, 1975

Item	January	February	March	April	May	June
Farm Value	7.9	7.7	7.0	6.9	6.2	5.6
Wheat	4.9	4.8	4.4	4.4	4.1	3.6
Other ¹	3.0	2.9	2.6	2.5	2.1	2.0
Farm-Retail Spread	² 29.3	29.7	30.3	29.9	30.0	30.0
Miller	0.9	0.4	0.5	0.4	0.5	0.6
Baker-wholesaler	19.9	20.9	21.4	21.4	22.0	22.3
Retail	5.7	5.6	5.6	5.2	4.7	4.2
Other ³	2.9	2.8	2.8	2.9	2.8	2.9
Retail price	37.2	37.4	37.3	36.8	36.2	35.6

¹ Includes lard, shortening, sugar, and nonfat dry milk.
² Totals may not add due to rounding. ³ Charges for transporting and handling all ingredients; processing farm ingredients other

than wheat; and costs of nonfarm ingredients such as yeast and salt.

WRAPUP OF 1974/75

After maintaining a fairly stable pace during the first 3 quarters, disappearance faltered during April-June (table 2). The anticipated last minute flurry in exports did not materialize because of cancellations and deferrals. In fact, the average weekly export pace of around 17 million bushels was the lowest for any quarter of the year. As a result, 1974/75 exports totaled 1,039 million bushels, moderately below earlier estimates. While this was off from the past 2 years, it still was the third largest on record. As predicted earlier, mill grind picked up during April-June. This brings the total for the year to 525 million bushels, still slightly below the level of the past 2 years.

The basis for determining wheat feeding on a quarterly basis was discussed in some detail in the August 1974 and May 1975 Wheat Situations. The discussion was prompted by the fact that the

January-March 1975 wheat feed residual was well above expectations. It was theorized that accounting discrepancies might lead to a sizable negative wheat feed residual in the April-June quarter, and it came to pass with a negative 58 million bushels. This resulted in a net wheat feeding for the 1974/75 year of 72 million bushels, compared with 140 million a year ago.

The 1974/75 crop year was the first since 1971/72 to show some increase in carryover stocks. Although the record 1974 crop was smaller than expected, an easing in disappearance resulted in a somewhat less chaotic market than in the 2 previous seasons. Wheat prices at the farm ranged from nearly \$5 per bushel last fall to a low of around \$3 in June 1975, but the month-to-month changes were much less dramatic than a year ago. The average price received by farmers of \$4.04 per bushel was still the highest on record.

WORLD WHEAT SITUATION¹ OUTLOOK FOR 1975/76

World Crop Likely Larger in 1975

As usual, weather has been variable over the world's wheat belt. Currently major producers are struggling with both excessive moisture and drought. As of mid-July, 1975 world wheat production was estimated at about 360 million metric tons, up 3% from 1974. Expected bumper crops in Canada, Argentina, South Africa, India, Iran, Turkey, and the United States are offsetting projected smaller crops in Australia, West and East Europe (table 19). The Soviet Union, the world's leading wheat producer, is suffering from a severe drought which may result in a crop only moderately larger than last year's relatively poor harvest. World wheat area for 1975 is estimated at 224 million hectares, up 1% over 1974, and yields per hectare are projected up 3% over 1974.

Drought in Spring Area Cuts Soviet Crop

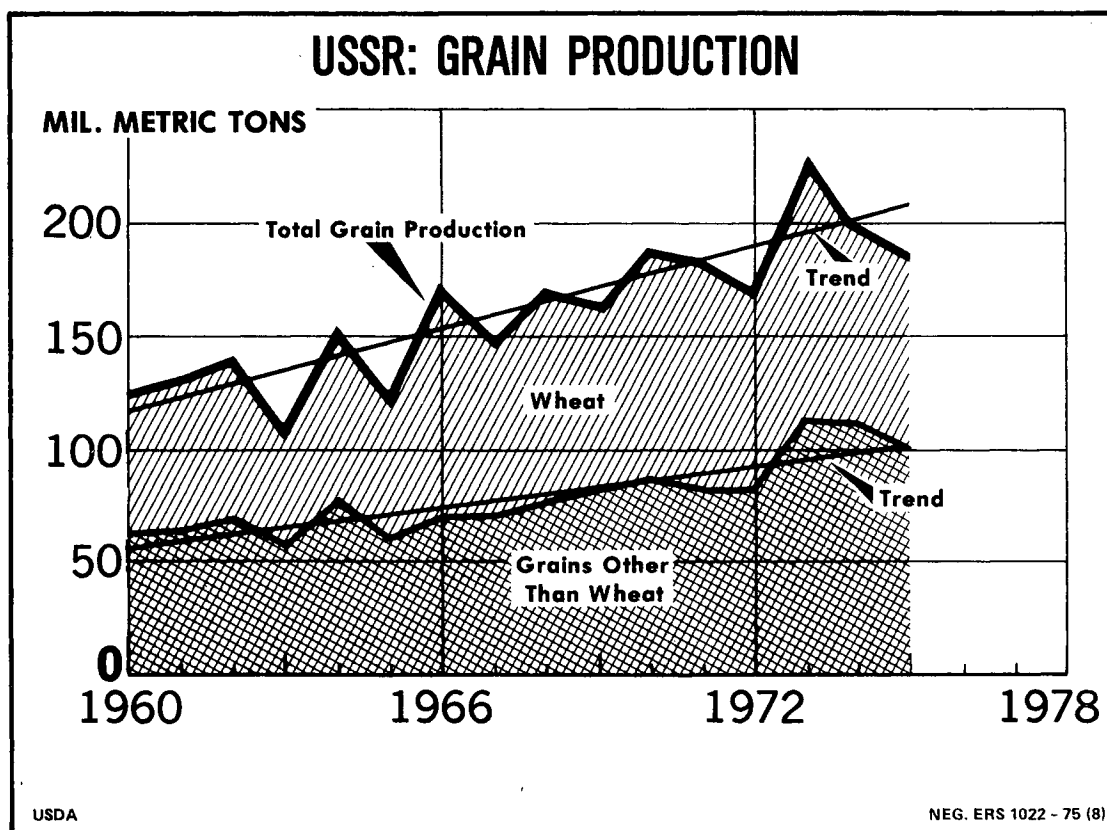
USSR's 1975 wheat crop is estimated at 85 million tons, down 10 million tons from USDA's earlier estimates but about the same as last year's. Dry weather last fall prevented winter wheat planting from reaching the planned levels, but later weather conditions were fairly good for crop development. However, spring wheat, which accounts for around

60% of the crop, has been under stress since seeding. Unusually low rainfall and above normal temperatures have prevailed in the Volga region, the Southern Urals, portions of Kazakhstan, and Western Siberia. While this weather facilitated spring fieldwork, its persistence has proven harmful to crop development. These conditions persisted in July, a particularly critical month for spring grain

**USSR: Wheat production, average 1966-70,
annual 1971-75**

Year	Winter	Spring	Total
<i>1,000 metric tons</i>			
1966-70 average .	35,888	54,304	90,192
1971	47,618	51,142	98,760
1972	29,380	56,613	85,993
1973	49,435	60,349	109,784
1974	44,698	39,151	83,849
1975	46,000	39,000	85,000

¹ Contributed by William F. Hall. Based primarily on *World Grain Situation and Outlook*, FAS, July 1975. Data are in metric units.



development. In addition, the below normal moisture areas expanded eastward into the important spring wheat producing areas of Kazakhstan.

USDA's estimate of total Soviet grain production in late July was 185 million metric tons—10 million tons below early July. This included 85 million tons of wheat, which was 5 million under early July and 10 million under early June.

Less Area and Smaller Yields Reduce Western Europe's Wheat Crop

The West European wheat harvest for 1975 is expected to be around 50 million tons, down about 11% from 1974. All sorts of weather adversities plagued farmers, starting with extremely wet conditions last fall that impeded plantings. This was followed by a cold spring that saw the latest frosts on record in parts of the United Kingdom and snow still falling in June over much of the North Sea region. Crop losses will be greatest in the United Kingdom, Sweden, Greece, France, and Belgium.

Wet Weather Plagues East Europe's Wheat Crop

In East Europe wheat production is estimated at 31 million tons, down 8% from 1974. Wet weather last fall in East Germany, Poland, and Yugoslavia curbed winter seedings. Recent heavy rains have resulted in flooding in the countries along the Danube and dry weather has taken its toll in East Germany. The Yugoslav crop is estimated a fifth lower and Czechoslovakia's wheat production may be down nearly a fifth. Except for recent floods the Romanian crop has fared well and output is expected to be a tenth larger.

India's Wheat Crop Up Sharply

India's 1975 wheat crop, the first major harvest of the season, is estimated at 25.8 million tons, up 17% from the relatively small crop of 1974 but still a little under the 1972 record. The good crop was attributed to improved irrigation, expanded use of high yielding varieties, and favorable weather in March at the critical heading period. The good harvest eases somewhat the extremely tight supply situation India has been facing, but demand pressures continue to swell, if for no other reason than rapid population growth.

Canadian Crop Promising

The Canadian wheat crop was off to a good start and was developing well throughout the Prairie Provinces by late July. However, general hot dry weather, which hastened crop development, also brought on the need for rain for the critical heading

period. Current estimates place the Canadian crop at around 16.5 million tons, 16% above the 1974 level. However, reduced carryover would result in a 1975/76 supply somewhat under the previous year.

Dry and Wet Conditions Hamper Australia's Wheat Crop

Australia's 1975 wheat harvest may be down about a fourth from the 11.7 million ton crop of 1974. Planting was delayed in the southern wheat belt because of serious drought; then too much of a good thing occurred when drought-breaking rains persisted, hampering seeding. Plantings are expected to be off about 5% from last year's 8.9 million hectares and yields may be well under last year's 13.1 quintals per hectare.

World Wheat Trade To Continue High

World wheat trade for 1975/76 (July-June) is projected at 72 million tons (including intra-EC 9), 3.5 million tons higher than last season and near the 1972/73 record. The major development on the import side is the increased USSR purchases from 2.5 million tons in 1974/75 to around 10 million tons. Reported wheat purchases as of July 24 totaled about 8 million tons: 4.2 million from the United States, 3.0 million from Canada, and 800,000 from Australia. The Soviets' gross grain import needs are estimated at around 20 million tons with approximately 14 million tons already purchased. Imports by other major regions are expected to show moderate increases or hold near last year's level. The biggest drop in import demand appears to be in Iran and Turkey where the 1975 harvests are up sharply.

Little Change for World's 1975/76 Ending Stocks

The world's year ending stocks for 1975/76 are projected at around 52 million metric tons, down 12% from the total projected level in April and about the same as the low level at the end of last season.² This suggests that the 1976 crop will be very important in determining next year's wheat supply.

Turnaround in World Wheat Prices

C.i.f. Rotterdam wheat prices began a steady decline last December, particularly for lower protein wheats. However, Soviet wheat purchases in late June and July sparked a turnaround in wheat markets.

²Stocks data are based on an aggregate of different local marketing years and should not be construed as representing world stock levels at a fixed point in time.

Wheat prices at Rotterdam, the Netherlands, c.i.f.

Classes and year	February 25	March 25	April 29	May 27	June 30	July 21
	<i>Dollars per bushel</i>	<i>Dollars per bushel</i>	<i>Dollars per bushel</i>	<i>Dollars per bushel</i>	<i>Dollars per bushel</i>	<i>Dollars per bushel</i>
United States						
HRW 13.5% ¹						
1974	6.58	5.78	4.91	4.64	5.21	5.23
1975	4.76	4.55	4.30	3.84	4.35	4.99
DNS 14%						
1974	6.56	5.72	4.87	5.08	5.66	5.74
1975	5.14	4.80	4.65	4.61	4.61	5.00
Canada No. 1						
CWRS 13.5%						
1974	6.54	6.79	4.90	4.03	(²)	(²)
1975	5.27	4.93	5.30	5.17	(²)	(²)

¹ Beginning January 1974, quoted as 12 percent, effective June 1974, quoted as 13.5 protein. ² Not quoted.

Basis: 30 to 60 days delivery. Source: *Foreign Agriculture*, FAS.

HIGHLIGHTS OF THE RYE SITUATION

Carryover Smallest Since 1964

The 1974/75 rye season featured the smallest crop and supply since the early 1950's; high prices, particularly in relation to wheat; an accompanying drop in mill grind; a sharp drop in usage by the distilling industry; and a return to more traditional exports from the high levels of the 2 previous years.

Total 1974/75 disappearance even though down 50% from last season, was still large enough to pull ending stocks on July 1 to 5.9 million bushels, the lowest level since 1964.

Another Small Supply in 1975/76

The 1975 rye crop is forecast at 18.8 million bushels, down 2% from the 1974 level. Yield is expected to average 2 bushels more than last year's 21.5 per acre, because of improved growing conditions in the North Central States, particularly South Dakota. However, harvested acreage at 800,000 acres continues its long term decline, dropping more than a tenth to another all-time low. This year it appears that North Dakota will be the Nation's leading producer, replacing its neighbor to the South, the long reigning producer.

The smaller crop and carryover place the 1975/76

supply near an all-time low. This suggests that prices will still continue strong relative to competing grains and demand for rye, both farm and domestic, will continue to be dampened.

Wheat and rye cash prices

Year and Month	No. 2 wheat SRW Chicago	No. 2 rye Minn.	Wheat/rye ratio
	<i>Dollars per bushel</i>	<i>Dollars per bushel</i>	<i>Percent</i>
1970/71	1.67	1.13	148
1971/72	1.58	1.00	158
1972/73	2.31	1.11	208
1973/74	4.93	2.62	188
1974/75			
July	4.40	2.97	148
August	4.34	2.89	150
September	4.41	3.07	144
October	5.03	3.25	155
November	4.86	3.19	152
December	4.60	3.05	151
January	4.02	2.93	137
February	3.84	2.80	137
March	3.62	2.56	141
April	3.63	2.72	133
May	3.25	2.70	120
June	3.03	2.49	122

Rye: Acreage, yield, and production, 1974-75

State	Area harvested		Yield per acre		Production	
	1974	1975	1974	1975	1974	1975
	<i>1,000 acres</i>		<i>Bushels</i>		<i>1,000 bushels</i>	
South Dakota	202	95	21.0	26.0	4,242	2,470
North Dakota	106	110	26.0	27.0	2,756	2,970
Minnesota	72	95	25.0	28.0	1,800	2,660
Oklahoma	45	36	17.0	19.0	765	684
Nebraska	55	60	20.0	21.0	1,100	1,260
Georgia	115	110	18.0	18.0	2,070	1,980
Other	302	294	21.7	23.1	6,560	6,806
Total U.S.	897	800	21.5	23.5	19,293	18,830

REGIONAL PREFERENCES FOR WHEAT FLOURS

by

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ABSTRACT

Changes in the composition of domestic flour consumption have an impact on the product mix produced by the flouring milling industry and determines in part the domestic demand for various classes of wheat. A statistical analysis was made to study the relationship of flour consumption to differences in income levels, urbanization patterns, and family size. Income was an important variable in determining the type and quantity of flour consumed. The effect of changes in income varied greatly depending upon the region, population group, and type of flour under consideration. Regional per capita consumption of all flour varied from 97.3 pounds in the West to 113.0 pounds in the South during 1973. Regional differences in per capita consumption of individual flour types were large and reflected significant regional differences in tastes and preferences in addition to income effects.

Key Words: Regional flour demand, wheat flours, demand analysis, and domestic consumption.

INTRODUCTION

A variety of wheat products is available to the American consumer, and the primary ingredient in these products is wheat flour. The flour used to make different products is not a homogenous commodity. For example, flour used by bakeries to make cakes won't always make acceptable white bread, and vice versa. Different classes or varieties of wheat are carefully blended for milling into flours that are suited for making each product or group of products.

Changes in consumer preferences for these products, due to rising income levels and population shifts, have a direct impact on the domestic utilization of wheat flours. Furthermore, changes in domestic use of each type of flour affect the product mix produced by flour millers as well as the type or classes of wheat milled by the flour milling industry.

Published data on domestic utilization of wheat flour are generally limited to statistics on total civilian consumption for food and per capita food use (9 p. 62)¹. These data give a good indication of trends

in total and per capita consumption of flour; however, these data do not provide any insights into composition of flour consumption by type of flour. The *Household Food Consumption Survey* (HFCS) is a major source of information on consumption patterns for wheat products; however, the frequency of the survey (every 10 years) limits the usefulness of this series as a continuous source of information. Thus, there is a need for methods that can be used to analyze and estimate shifts in flour consumption patterns during periods not covered by the surveys.

Research was initiated to evaluate regional flour consumption patterns reflected in the HFCS Survey for different types of wheat products. The study was designed to quantify the relationships between reported household consumption in various regions and for various income levels, urbanization patterns², and family sizes.³ Regional flour consumption patterns were estimated for selected

² The term urbanization patterns refers to the distribution of population among the urban, rural nonfarm, and farm population groups.

³ An underlying assumption of this study is that estimated per capita consumption of flour based on (7) is representative of the eating habits of the U.S. population at home, and away from home.

¹ Italicized numbers in parenthesis refer to references listed at the end of the report.

years on the basis of changes in the related variables. Changes in estimated per capita use of individual flours over time provide useful insights into possible shifts among types of flour that may be associated with declines in the per capita consumption of all flour.

RELATED RESEARCH

Published research analyzing domestic flour consumption patterns is almost nonexistent. The most widely referenced work was by Bitting and Rogers published in 1963 (1). That study of the domestic food market for wheat considered the end uses (wheat products) and related these to the wheat properties desired for each use. The wheat flours defined in that study were hard, soft, and durum, corresponding to the respective wheat types. This research was based in part on information obtained from the 1955 *Household Food Consumption Survey*.

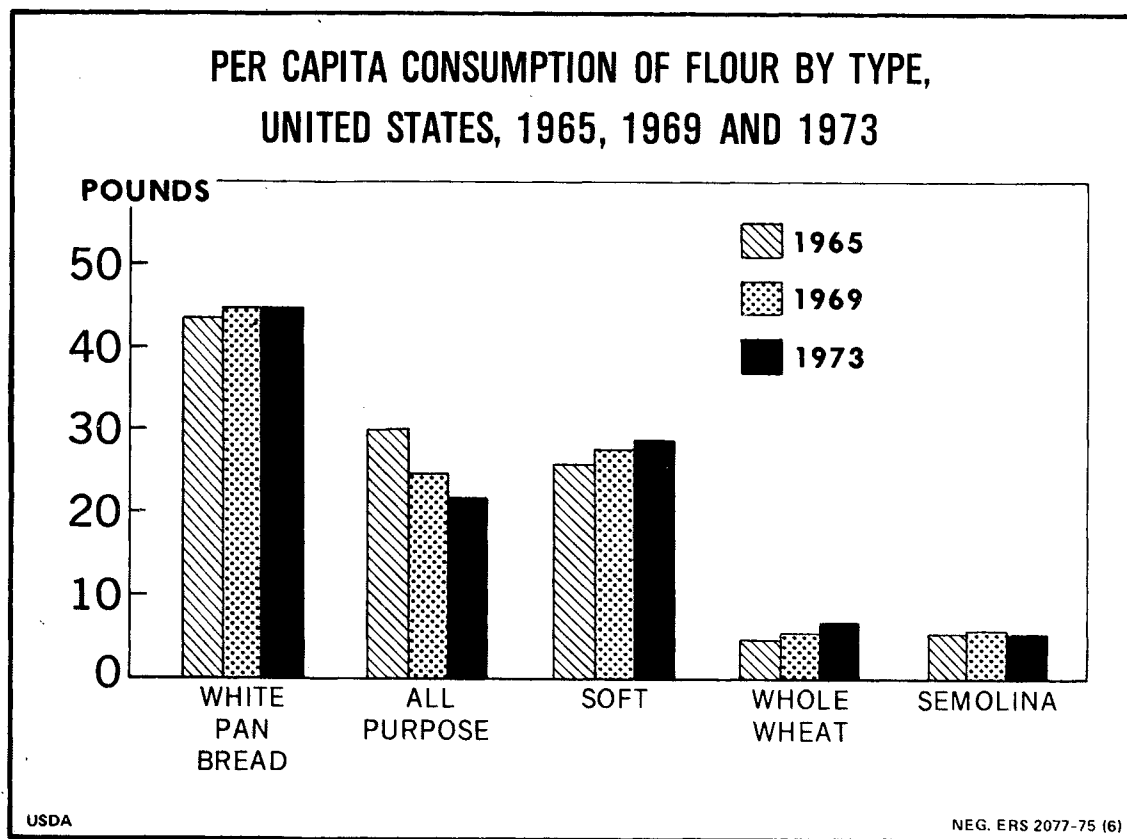
The National Commission on Food Marketing published estimates of domestic utilization of wheat flour for 1965 (5, p. 5). These data were allocated as hard, soft, and durum flour and were based on the breakdown given in the 1963 article by Bitting and Rogers. Domestic consumption estimates, like those of Bitting and Rogers, reflect consumer taste and preferences that existed at the time of the 1955 *Household Food Consumption Survey*.

RESEARCH METHODS

Current needs for information and data on flour consumption patterns require quantifications of the impacts of income levels and population characteristics on the composition and level of domestic utilization of flour. Population characteristics include such factors as regional distribution, urbanization patterns, and family size. Once the relationships of these factors to consumption are established, consumption patterns can be estimated on the basis of changes in these demographic factors.

The 1965-66 *HFCS* (7) contained data on the consumption of 17 different wheat products. These products include family flour, prepared mixes, bakery products and alimentary paste products (Table 1). The regional data in *HFCS* were presented by family income level and census population group (urban, rural, farm) and the average family size for each income strata was given. Income levels ranged from \$500 per family per year to \$17,500 and over.

The *HFCS* data on consumption of wheat products were converted to flour equivalents, using the factors shown in table 1. These data were then aggregated into five flour categories for analysis: white-pan bread flour, all-purpose flour, soft flour, whole wheat flour, and semolina. These flours were considered to be representative of U.S. flour mill production and



STATISTICAL RELATIONSHIPS

were established through consultation with flour milling specialist at Kansas State University, as well as milling industry personnel. The derived flour consumption data were maintained in stratified form based on income levels for purposes of statistical analysis.⁴

Statistical equations were estimated to relate per capita flour consumption to consumer location, urbanization, disposable income, and family size. Coefficients were estimated for each flour type using the *HFCS* data and multiple regression with case combinations (2). Dummy variables⁵ were incorporated into the regression analysis to study differences in taste and preferences among the regions and population groups and to study differences in the impact of income among the regions and population groups. Thus, it was assumed that taste and preferences for wheat products vary among population groups and among regions, and because of this variation, the impact of changes in income are significantly different. Regression equations that did not allow for a variable income effect were evaluated, but were not used because the impact of income varied considerably.

The statistical relationships established above are presented in table 2. These were used to estimate regional per capita consumption of flour by type for each population group during 1965-66, 1969, and 1973. Regional and U.S. per capita consumption estimates were calculated from these estimates on the basis of the population distributions given in table 7.

The 1965-66 estimates were based on average income and household size data derived from *HFCS*. The data needed to derive 1969 estimates were available in 1970 Census publications (6), and data for 1973 were developed with the assistance of the Census Bureau and the Department of Commerce. Statistics on household size by urbanization were not available for 1973, and average household size was assumed to be the same as in 1969. Therefore, changes in estimated consumption between 1969 and 1973 were not associated with changes in household size. Average household size changes slowly, so this assumption should not have a significant impact on the results.

The income data for 1969 and 1973 were deflated using the Consumer Price Index for all items. It would have been desirable to compute estimates for 1974, but the income and demographic data were not available when the analysis was made.

⁴Wheat flours used in foods other than wheat products (for example, soups and baby foods) were not included in this analysis.

⁵Dummy variables are generally used to represent temporal effects such as seasonal shifts and interregional differences and are discussed in greater detail by Johnston (3, pp. 221-228).

The base region and urbanization in each equation, presented in table 2, was the Northeast—urban sector. The incremental values for the intercept and income effect for other stratifications are relative to that base. For example, the impact of a \$1,000 increase in per capita income of the farm sector in the South would be to increase per capita consumption of white-pan bread flour by 7.8 lbs. per year ($-2.0554 + 5.2197 + 4.6385 = 7.8028$).

White Pan Bread Flour—The impact of income changes on consumption of white pan bread flour varied depending upon location and population group. Use increased as income rose for the farm population in all regions and for all population groups in the South. The income impact ranged from a decline of 2.4 pounds per \$1,000 for the urban population in the North Central region to an increase of 7.8 pounds for the farm population in the South. Also strong positive relationship was found between average family size and white-pan bread flour consumption, indicating that larger families with children may eat more sandwiches.

All-Purpose Flour—Gains in incomes cut per capita consumption of all-purpose flour in all cases. The impact of an increase of \$1,000 ranged from a decrease of 1.9 pounds for the urban population in the Northeast to a decline of 18.9 pounds for the Southern farm population. Per capita use for the rural population in the South fell off 16.9 pounds, the marked negative effect of income for the Southern rural and farm population groups for all-purpose flour undoubtedly reflects the large amount which these groups consume relative to other regions and urbanizations. Increased income for these groups results in a significant decline in consumption of all-purpose flour and an increase in consumption of white pan bread flour which exceeds that of other regions and urbanizations (table 2). Some of the effect of household size could be included in the higher indicated consumption of the rural and farm population groups. Larger families in urban areas may patronize thrift stores. This action by the latter group would influence the effect of household size on consumption of all-purpose flour. An increase in household size tended to cut down on consumption of all-purpose flour, indicating that larger families may not necessarily bake more at home as might be hypothesized. However, the evidence presented here cannot be regarded as conclusive.

Soft Flour—The analysis did not reveal a great deal of variation in consumption that could be attributed to population group or location. A positive and significant response to income increases was indicated. With the exception of the Western region, the income impact was not substantially different among stratifications.

Whole Wheat Flour—Per capita consumption of

whole wheat flour products has been small, but all population groups in all regions used more whole wheat flour as their incomes rose. However, the increase was least marked in the South, where income gains were more strongly associated with increased use of white pan bread flour.

Semolina—Variations in consumption due to location and population strata were very evident. The response to income increases was mixed with farm and urban people using less while the rural population consumed more. As was the case for white pan bread flour, the household size was significant as a determinant of per capita consumption of semolina.

COMPARISON OF ESTIMATES

The regression equations were used to analyze regional consumption patterns for 1965-66, 1969, and 1973. The 1965-66 analysis was made primarily to provide a means of evaluating the equations as an approach to estimating flour consumption patterns. The 1965-66 regional estimates for each type of flour are presented in table 3 with comparable data derived from the 1965-66 *HFCS*. The U.S. estimates are weighted averages based on the population weights presented in table 7.

The estimates generally compared very favorably with the survey results, and the variation was less than one pound for 16 of the 20 estimates. The most significant departure was in the West where actual consumption of all purpose flour exceeded estimated consumption by more than 3 pounds per capita.

Comparing regional total estimates and survey consumption figures (table 3) reveals that the estimates were less than the survey figures for the North Central, South, and West, and only slightly higher for the Northeast. Comparing the U.S. survey and estimated figures by flours reveals that the estimates were less than the actual for white pan bread flour, soft flour, and semolina and greater than the actual for all-purpose flour and whole wheat flour. The difference between the survey and estimated values for total U.S. per capita consumption of wheat flours was 0.69 pounds per capita per year.

Consumption estimates for 1965, 1969, and 1973 are presented in table 4. These estimates are not strictly comparable to the published series on per capita disappearance (9, p. 62) because the latter estimates include industrial uses of flour second clears while the *HFCS* data include only food use. Data on this nonfood use were not available for 1973. However, the quantity used by industry during 1969 was 5,642 thousand cwt. (10, p. 21) or about 2.8 pounds per capita. If the reported domestic disappearance in (9) of 112 pounds is reduced by this amount, domestic food use would be 109.2 pounds, which approximates the statistical estimate for 1969 of 109.3 pounds (table 4). Thus, the estimates generated using the equations appear to be fairly accurate from the standpoint of overall consumption.

LOCATION MAKES A DIFFERENCE

Estimates of per capita consumption of wheat flours for human food in the four regions used in the study show differences in preferences for wheat flours and indicate changes in consumption patterns of those flours (tables 4 and 5). Average U.S. per capita consumption estimates indicate that white pan bread flour was the preferred flour during the study period and that an increase in total consumption of white pan bread flour occurred. During this 9-year period, estimated per capita consumption of this flour declined in the Northeast and West and increased in the South and North Central regions. Changes in consumption were not consistent among regions.

The income coefficients of table 2 for white pan bread flour indicate that decreased per capita consumption of white pan bread flour in the urban and rural populations of the Northeast, North Central, and Western regions can be expected as incomes increase. In the South, increased per capita consumption for all populations would be expected with increasing income, other factors held constant. Farm populations would increase white pan bread flour consumption with increasing income in all regions; however, the southern farm population would have the greatest increase in white pan bread flour consumption from a given income increase. The pronounced positive income effect in the South increased U.S. average per capita consumption of white pan bread flour during the study period. A slight increase in household size in the urban population of all regions and in the rural population of all regions except for the South occurred from 1965 to 1969. However, there was a decline in household size in the farm population of all regions except for the South. The positive effect of the slightly increasing household size overshadowed the negative income effect on per capita consumption of white pan bread flour in only one instance—the North Central region from 1965 to 1969.

Further examination of U.S. per capita consumption estimates indicates that soft flour became the number 2 preferred flour during the study period, overtaking all-purpose flour. This suggests that as income levels rise, less home baking is done, more commercial mixes are used, and more sweet goods are consumed. Tables 4 and 5 show a shift to white pan bread and soft flours at the expense of all purpose flour in the South. Consumption of products made from soft flour was preferred to all purpose flour throughout the entire study period in all regions except the South. All regions showed an increase throughout the study period in per capita consumption of soft flour while consumption of all-purpose flour declined in all regions.

This shift in consumption patterns reflects the impact of two important factors. First, rising income levels boosted consumption of soft flour products

while lowering use of all-purpose flour for all population groups in all regions (table 2). Second, the proportionate increase in urban population relative to the other groups (table 7) increased soft flour consumption and decreased all-purpose flour consumption. The farm and rural populations preferred all-purpose flour over soft flour products (prepared mixes and bakery sweet goods); however, the percentage of total population represented by those groups decreased from 30.0 to 26.7 percent between 1965 and 1973. Semolina or durum flour ranked fourth in U.S. average per capita consumption throughout the study period. However, by 1973, whole wheat and semolina flours had essentially the same estimated consumption per capita in the U.S. Consumption of semolina flour changed slightly, while consumption of whole wheat flour increased by 1.2 pounds per capita as a result of increased incomes (table 2).

Examination of tables 4 and 5 reveals that the Northeast had a decided preference for semolina in comparison to the other regions. The income coefficients of table 2 indicate that semolina consumption per capita is declining in the urban and farm populations and increasing in the rural population in the Northeast, the South, and the North Central regions. In the West, per capita use of semolina declined as incomes rose for all residence groups. Table 4 indicates the net effects of population density, household size, and income effects among populations on regional semolina per capita consumption. Generally, semolina consumption per capita remained static during the study period.

The significant regional differences in consumption per capita of whole wheat and semolina flours undoubtedly are due in part to the cultural heritage of major population groups in the various regions. However, the authors did not attempt to relate these differences in consumption to such factors.

CONSUMPTION TRENDS

Recent declines in domestic per capita consumption of flour has stimulated new interest in flour consumption trends. Much of this interest centers around the composition of consumption in terms of flour types (11, p. 7); however, the general lack of data limits the depth of recent analysis.

The trend in consumption for each of the flour types considered in the study is illustrated in the accompanying chart. These trends in consumption are reinforced or substantiated when changes that occurred prior to 1965 are also considered. Comparable data for 1959-60 were derived from the article by Bitting and Rogers (1). These figures are presented in table 6. The 1965-66 data derived from *HFCS* (7), and the 1973 consumption estimates are shown for purposes of comparison.

It appears that a substantial decline in the

consumption of white pan bread flour took place prior to 1965-66. However, if the consumption figures for this flour are combined with whole wheat flour (the other bread type flour), the per capita consumption of bread type flour remained stable. The combined figures for the respective years are 51.2, 49.3, and 51.2 pounds per capita. This suggests that the increase in whole wheat flour has been a substitution for white pan bread flour, and the consumption of bread and rolls has been relatively stable with only a slight increase since 1965-66.

Table 6 also reveals that the trends in per capita consumption of all purpose and soft flours indicated in this study were continuations of trends established prior to the study period. In fact, the decline in per capita consumption of all-purpose flour between 1959-60 and 1965-66 (9.2 pounds) was greater than the estimated decline between 1965-66 and 1973 (8.1 pounds). During the same periods of time, respective increases of 5.5 and 2.8 pounds were indicated for per capita consumption of soft flour. Semolina consumption declined during both periods, but these declines were relatively small (0.8 and 0.2 pounds, respectively).

Per capita consumption estimates for each flour type were not developed for 1974. The above analysis of trends would suggest that the drop to 106 pounds per capita in 1974 involved declines in all-purpose flour and semolina consumption. However, the drop between 1973 and 1974 was the largest decline in recent years and is greater than can be explained by the regression equations developed in this study. A recent analysis of breadstuffs trends (11, p. 79) indicated that the increases in sugar prices which occurred in 1973 may have significantly affected consumption of products made from soft flours. The present analysis provides no basis to evaluate this possibility.

SUMMARY

Changes in the composition of domestic flour consumption have an impact on the product mix produced by the flour milling industry and determines in part the domestic demand for various classes of wheat. The objective of this study was to develop better information on flour consumption patterns and trends through a statistical analysis of household food consumption data.

The analysis revealed significant differences in regional preferences for wheat flours. Estimated regional consumption of all flour varied from a low of 97.3 pounds per capita in the West to a high of 113.0 pounds in the South during 1973. The variation among regions was even greater for individual flour types. The largest regional variation was found for all purpose flour, for which per capita consumption ranged from a low of 12.0 pounds in the Northeast to a high of 34.5 pounds in the South.

Disposable income was found to be an important determinant of consumption, and the impact of changes in income varied greatly among regions, and population groups for the 5 flour types.

An analysis of consumption trends revealed changes in consumption patterns since 1965 that were similar to trends that existed during the early 1960's. Per capita consumption of bread type flour was fairly stable, although whole wheat flour substituted to some extent for white bread flour. Domestic per capita consumption of all-purpose flour has declined significantly since 1959-60, and this decline more than offset a sizable increase in soft flour consumption. Overall, the per capita consumption of flour declined almost 10 pounds between 1959-60 and 1973, and preliminary data indicate that this trend continued during 1974.

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Table 1.--Proportions of products in 1965-66 Household Food Consumption Survey considered to be flour, by type of flour

Item	Bakers W.P. bread flour	All-purpose flour	Soft flour	Whole wheat flour	Durum or Semolina
Flour					
Flour, all-purpose		1.0000			
Mixes					
Pancake mix			0.7000		
Biscuit, roll, muffin		0.8000			
Cake mix			0.3000		
Piecrust mix			0.6500		
Cookie mix			0.7000		
Bakery Products					
White pan bread	0.6329				
Whole wheat bread				0.6329	
Crackers			0.8500		
Rolls	0.6329				
Muffins, biscuits		<u>1</u> /0.7400			
Cake			0.3000		
Pie			0.6500		
Cookies			0.7000		
Coffee-cake	0.6329				
Doughnuts		<u>2</u> /0.4720	<u>3</u> /0.2750		
Macaroni & Other Pastas					0.9200

1/ Assumes 0.5 of consumption is biscuits containing 80% all-purpose flour and 0.5 of consumption is muffins containing 67% all-purpose flour.

2/ Assumes 0.5 of consumption is raised doughnuts containing 80% all-purpose flour.

3/ Assumes 0.41 of consumption is cake doughnuts containing 67% soft flour.

Source: Flour content of various items from (3) in consultation with Professor Arlin Ward, Department of Grain Science and Industry, Kansas State University.

Table 2.--Summary of parameter estimates for flour consumption equations by type of flour
(per capita consumption is the dependent variable in all cases)^{1/}

Type of flour	Equation intercept values						Effect of household size	Impact of per capita income (lbs./thous. \$)						R ²
	Urban North-east	Incremental value associated with -						Urban North-east	Incremental impact associated with -					
		Rural	Farm	South	N. Cent.	West			Rural	Farm	South	N. Cent.	West	
White pan bread flour	37.9775	-1.0284 (0.43)	-9.4143 (3.70)	-16.6675 (6.43)	-3.2517 (1.17)	-8.6683 (3.10)	4.5462 (4.80)	-2.0554 (2.00)	0.6726 (0.53)	5.2197 (4.00)	4.6385 (3.67)	-0.3008 (0.22)	-0.0795 (0.06)	0.59
All purpose flour	20.3500	33.2220 (7.12)	54.8214 (11.02)	28.9839 (5.71)	7.2913 (1.34)	5.9065 (1.08)	-0.6938 (0.37)	-1.8569 (0.93)	-10.9460 (4.38)	-12.9280 (5.06)	-4.0737 (1.65)	-1.0234 (0.37)	-0.2917 (0.12)	0.85
Soft flour	21.7044	-0.6282 (0.35)	-1.0181 (0.54)	-4.2197 (2.18)	-0.3206 (0.15)	0.3928 (0.19)	0.0270 (0.04)	3.0156 (3.93)	0.6819 (0.71)	0.3832 (0.39)	0.3547 (0.37)	-0.3879 (0.37)	-2.1068 (2.19)	0.52
Whole wheat flour	5.1343	-2.2984 (2.73)	-1.6439 (1.83)	-2.0910 (2.29)	0.0490 (0.05)	1.9331 (1.96)	-0.3402 (1.02)	1.1931 (3.30)	1.0658 (2.37)	0.0430 (0.09)	-0.7742 (1.74)	-0.4566 (0.93)	0.1944 (0.43)	0.73
Semolina flour	7.7091	-2.7222 (3.39)	-2.1854 (2.55)	-5.5765 (6.39)	-3.2511 (3.47)	-1.4052 (1.49)	0.9030 (2.83)	-0.7134 (2.07)	0.9232 (2.15)	0.1562 (0.36)	0.5166 (1.22)	0.2356 (0.50)	-0.3266 (0.75)	0.61

^{1/}"t" values derived from the standard error of the parameter estimate are shown in parentheses below the estimated coefficients. Based on a sample size of 104, "t" values greater than 1.984 indicate significance at the 95 percent level of confidence (t ≥ 2.626 for the 99 percent level).

Table 3.--Actual and estimated per capita consumption of wheat flours,
by region, by type of flour, United States, 1965-66 ^{1/}

Flour	North Central	South	West	United States
	North Central	South	West	United States
	Pounds			
White pan bread flour				
Actual	49.37	46.35	41.39	44.37
Estimated	48.43	45.10	40.23	43.47
All purpose flour				
Actual	16.13	25.98	47.05	29.57
Estimated	17.80	26.29	46.34	30.05
Soft flour				
Actual	28.06	27.21	23.57	25.85
Estimated	28.14	26.72	23.21	25.56
Whole wheat flour				
Actual	6.20	5.04	2.09	4.90
Estimated	6.39	5.25	2.23	5.09
Semolina				
Actual	9.47	6.40	4.25	6.53
Estimated	8.90	6.09	4.55	6.39
Total ^{3/}				
Actual	109.23	110.98	118.35	111.24
Estimated	109.65	109.45	116.57	110.55

^{1/}Consumption figures in the "Actual" columns were derived from the 1965-66 Household Food Consumption Survey.

^{2/}Appendix table 1 contains the regional weights used to obtain the "U.S." consumption data.

^{3/}Summation of individual flours may not equal "Total" due to rounding.

Table 4.--Estimated per capita consumption of wheat flours for selected years, by region, by type of flour, United States ^{1/}

Year and Region	Flour					Total
	White pan bread	All purpose	Soft	Whole wheat	Semolina	
-----Pounds-----						
1965						
Northeast	48.43	17.80	28.14	6.39	8.90	109.65
North Central	45.10	26.29	26.72	5.25	6.09	109.45
South	40.23	46.34	23.21	2.23	4.55	116.57
West	39.12	22.28	24.15	8.82	6.74	101.11
U.S.	43.47	30.05	25.56	5.09	6.39	110.55
1969						
Northeast	48.45	13.55	30.98	7.52	8.77	109.27
North Central	47.92	21.04	28.85	5.68	6.70	110.18
South	42.78	38.57	25.63	2.67	4.59	114.24
West	38.84	19.42	24.98	9.93	6.23	99.40
U.S.	44.90	24.37	27.71	5.92	6.47	109.31
1973						
Northeast	47.63	12.00	32.06	8.01	8.52	108.23
North Central	47.49	17.89	29.90	6.06	6.63	107.96
South	44.14	34.51	26.87	2.89	4.57	112.98
West	38.28	17.27	25.35	10.49	5.90	97.27
U.S.	44.91	21.50	28.70	6.31	6.32	107.74

^{1/} Summations may not equal "Total" or "United States" due to rounding.

Table 5.--Relative importance of wheat flours, selected years, by region, United States

WS-233, August 1975

Year and Region	Flour					Total
	White pan bread	All purpose	Soft	Whole wheat	Semolina	
----- Percent -----						
1965						
Northeast	44.17	16.23	25.65	5.83	8.12	100.00
North Central	41.21	24.02	24.41	4.80	5.56	100.00
South	34.51	39.75	19.91	1.91	3.90	100.00
West	38.69	22.05	23.87	8.72	6.67	100.00
U.S.	39.32	27.18	23.12	4.60	5.78	100.00
1969						
Northeast	44.34	12.40	28.35	6.88	8.03	100.00
North Central	43.49	19.10	26.17	5.16	6.08	100.00
South	37.45	33.76	22.43	2.34	4.02	100.00
West	39.07	19.54	25.13	9.99	6.27	100.00
U.S.	41.05	22.28	25.34	5.41	5.92	100.00
1973						
Northeast	44.01	11.09	29.63	7.40	7.87	100.00
North Central	43.98	16.56	27.70	6.11	5.65	100.00
South	39.07	30.55	23.78	2.56	4.04	100.00
West	39.35	17.75	26.06	10.77	6.07	100.00
U.S.	41.68	19.96	26.64	5.85	5.87	100.00

Table 6.--Trends in Consumption By Type of Flour, United States, 1959-1973

Type of flour	Year		
	<u>1/</u> 1959-60	<u>2/</u> 1965-66	<u>3/</u> 1973
	<u>Pounds per year</u>		
White pan bread	50.69	44.37	44.91
All purpose	38.75	29.57	21.50
Soft	20.37	25.85	28.70
Whole wheat	.48	4.90	6.31
Semolina	7.32	6.53	6.32
All flour	117.61	111.24	107.74

1/ Derived from Bitting and Rogers (1) and based on the 1955 Household Food Consumption Survey.

2/ Derived from data published in the 1965-66 Household Food Consumption Survey (7).

3/ Estimated using statistical relationships.

Table 7.--Regional population weights used to derive U.S. per capita consumption of flours, 1965-66, and 1969

Urbanization	Region					United States
	Northeast	North Central	South	West		
<u>Proportion</u>						
<u>1/1965-66</u>						
Urban	0.7771	0.6653	0.5954	0.8681		0.7007
Rural	0.2061	0.2451	0.3210	0.1014		0.2384
Farm	0.0168	0.0896	0.0836	0.0305		0.0609
All	1.0000	1.0000	1.0000	1.0000		1.0000
Regional proportions	0.2483	0.2802	0.3223	0.1492		1.0000
<u>2/1969</u>						
Urban	0.7957	0.6243	0.7016	0.8202		0.7231
Rural	0.1910	0.3175	0.2117	0.1518		0.2259
Farm	0.0133	0.0582	0.0867	0.0280		0.0510
All	1.0000	1.0000	1.0000	1.0000		1.0000
Regional proportions	0.2413	0.2784	0.3090	0.1713		1.0000
<u>3/1973</u>						
Urban	0.8065	0.6333	0.7110	0.8313		0.7330
Rural	0.1815	0.3157	0.2129	0.1430		0.2220
Farm	0.0120	0.0510	0.0761	0.0257		0.0450
All	1.0000	1.0000	1.0000	1.0000		1.0000
Regional proportions	0.2413	0.2784	0.3090	0.1713		1.0000

^{1/}Source: Derived from population sample data reported in 1965-66, Household Food Consumption Survey, Reports 13-16.

^{2/}Source: Derived from U.S. Census of Populations, 1970, Detailed Characteristics of States, Table 199.

^{3/}Estimated based on total farm population statistics reported in Agricultural Statistics, 1974, Table 617, assuming any increases in population have occurred in the urban population category. Regional population proportions were assumed to be the same as those in 1969.

Table 2 --Wheat: U.S. supply and disappearance, average 1965-69, by quarters, 1971-75

Year and quarter	Beginning stocks	Production	Imports	Total supply	Exports				Disappearance				Total disappearance	Ending stocks		
					Grain 1/	Flour	Products 2/	Total	Flour	Other products 2/	Total food	Seed			Feed 3/	Total
----- Million bushels -----																
Average 1965-69																
July-Sept.	626.4	1,425.5	.4	2,052.3	163.2	14.8	2.2	180.2	128.7	3.3	132.0	26.2	64.7	222.9	403.1	1,649.2
Oct.-Dec.	1,649.2		.4	1,649.6	160.4	17.6	2.9	180.9	129.6	3.3	132.9	24.1	18.2	175.2	356.1	1,293.5
Jan.-Mar.	1,293.5		.4	1,293.9	149.4	12.7	3.1	165.2	126.5	3.3	129.8	.2	46.4	176.4	341.6	952.3
Apr.-June	952.3		.4	952.7	156.8	18.6	2.9	178.3	117.3	3.4	120.7	14.8	-1.0	134.5	312.8	639.9
Season	626.4	1,425.5	1.6	2,053.5	629.8	63.7	11.1	704.6	502.1	13.3	515.4	65.3	128.3	709.0	1,413.6	639.9
1971/72																
July-Sept.	731.5	1,617.8	.2	2,349.5	150.0	11.7	2.5	164.2	132.1	3.5	135.6	24.8	151.6	312.0	476.2	1,873.3
Oct.-Dec.	1,873.3		.2	1,873.5	118.4	8.9	2.9	130.2	130.0	3.5	133.5	23.6	38.9	196.0	326.2	1,547.3
Jan.-Mar.	1,547.3		.3	1,547.6	133.4	10.7	2.9	147.0	126.4	3.5	129.9	.4	59.9	190.2	337.2	1,210.4
Apr.-June	1,210.4		.3	1,210.7	174.7	14.5	1.9	191.1	123.3	3.6	126.9	14.4	15.2	156.5	347.6	863.1
Season	731.5	1,617.8	1.0	2,350.3	576.5	45.8	10.2	632.5	511.8	14.1	525.9	63.2	265.6	854.7	1,487.2	863.1
1972/73																
July-Sept.	863.1	1,544.9	.2	2,408.2	200.1	10.5	2.8	213.4	128.8	3.6	132.4	24.5	167.7	324.6	538.0	1,870.2
Oct.-Dec.	1,870.2		.3	1,870.5	273.3	10.5	3.1	286.9	132.9	3.5	136.4	23.1	25.5	185.0	471.9	1,398.6
Jan.-Mar.	1,398.6		.4	1,399.0	294.2	11.0	4.0	309.2	128.0	3.6	131.6	.5	30.5	162.6	471.8	927.2
Apr.-June	927.2		.4	927.6	364.9	8.7	3.2	376.8	123.7	3.6	127.3	19.1	-34.0	112.4	489.2	438.4
Season	863.1	1,544.9	1.3	2,409.3	1,132.5	40.7	13.1	1,186.3	513.4	14.3	527.7	67.2	189.7	784.6	1,970.9	438.4
1973/74																
July-Sept.	438.4	1,705.2	.3	2,143.9	382.5	12.2	1.5	396.2	130.0	3.6	133.6	30.6	134.3	298.5	694.7	1,449.2
Oct.-Dec.	1,449.2		.3	1,449.5	332.3	5.7	2.6	340.6	136.8	3.6	140.4	28.9	12.3	181.6	522.2	927.3
Jan.-Mar.	927.3		.4	927.7	221.7	8.3	1.7	231.7	131.6	3.6	135.2	.6	12.4	148.2	379.9	547.8
Apr.-June	547.8		2.8	550.6	168.1	10.0	1.8	179.9	115.3	3.5	118.8	24.0	-19.5	123.3	303.2	247.4
Season	438.4	1,705.2	3.8	2,147.4	1,104.6	36.2	7.6	1,148.4	513.7	14.3	528.0	84.1	139.5	751.6	1,900.0	247.4
1974/75																
July-Sept.	247.4	1,793.3	.9	2,041.6	261.1	6.5	1.8	269.4	128.4	3.6	132.0	31.5	58.6	222.1	491.5	1,550.1
Oct.-Dec.	1,550.1		.6	1,550.7	272.6	8.2	2.2	283.0	134.6	3.6	138.2	29.8	-1.7	166.3	449.3	1,101.4
Jan.-Mar.	1,101.4		.4	1,101.8	245.5	6.7	3.0	255.2	119.8	3.6	123.4	.6	74.4	198.4	453.6	648.2
Apr.-June ^{4/}	648.2		.3	648.5	220.0	8.1	3.5	231.6	127.8	3.6	131.4	24.7	-58.5	97.6	329.2	319.3
Season	247.4	1,793.3	2.2	2,042.9	999.2	29.5	10.5	1,039.2	510.6	14.4	525.0	86.6	72.8	684.4	1,723.6	319.3

1/ Adjusted for transshipments of U.S. wheat through Canada.

2/ Includes bulgar, rolled wheat, semolina and macaroni.

3/ Residual; approximates feed use and includes negligible quantities used for distilled spirits and beer.

4/ Partly estimated.

Table 3 --Wheat: Current indicators of export movement,
by program, coastal area and class of wheat,
July-June 1973/74 and 1974/75

Period, program, and coastal area	Wheat (grain only)-Inspections for export ^{1/}						
	Hard winter	Red winter	Hard spring	Durum	White	Mixed	Total
	- - - Million bushels - - -						
<u>July-June 1973/74</u>							
Dollars	622.8	21.8	208.8	40.4	110.2	4.5	1,008.5
CCC Credit	38.4	.2	2.3	.5	3.2	---	44.6
Commercial	661.2	22.0	211.1	40.9	113.4	4.5	1,053.1
P.L. 480	31.8	2.1	2.8	---	2.1	---	38.8
Total	693.0	24.1	<u>2/217.0</u>	40.9	<u>3/116.3</u>	4.5	1,095.8
<u>July-June 1974/75</u>							
Dollars	420.8	106.2	125.4	48.9	161.6	3.5	866.4
CCC Credit	4.8	---	---	---	---	---	4.8
Commercial	425.6	106.2	125.4	48.9	161.6	3.5	871.2
P.L. 480	55.7	32.0	.7	---	30.3	3.9	122.6
Total	481.3	138.2	126.1	48.9	191.9	7.4	993.8
<u>July-June 1973/74</u>							
Coastal areas:							
Great Lakes	1.2	1.4	71.5	26.7	.4	---	101.2
Atlantic	2.6	5.1	7.6	4.3	1.1	---	20.7
Gulf	565.5	13.7	58.2	7.5	---	---	644.9
Pacific	123.7	3.9	79.7	2.4	114.8	4.5	329.0
Total	693.0	24.1	217.0	40.9	116.3	4.5	1,095.8
<u>July-June 1974/75</u>							
Coastal areas:							
Great Lakes	---	4.4	36.2	30.3	.8	---	71.7
Atlantic	---	65.6	.7	4.8	11.9	.9	83.9
Gulf	384.5	66.1	41.5	12.5	---	1.1	505.7
Pacific	96.8	2.1	47.7	1.3	179.2	5.4	332.5
Total	481.3	138.2	126.1	48.9	191.9	7.4	993.8

^{1/} Based on weekly reports of inspections for export. Does not include rail or truck movement to Canada or Mexico. ^{2/} Includes 3,119,000 bu. A.I.D. ^{3/} Includes 731,000 bu. A.I.D.

Table 4 --Wheat: U.S. inspections for export, by programs and country of destination, July-June 1974/75

Country	Dollar sales	CCC credit	PL-480	Total
			1,000 bushels	
Afghanistan	73	---	---	73
Algeria	26,913	---	---	26,913
Azores	325	---	---	325
Bangladesh	6,324	---	19,313	25,637
Belgium	5,363	---	---	5,363
Bolivia	978	---	---	978
Brazil	21,300	---	---	21,300
Chile	4,140	1,279	14,012	19,431
China (Taiwan)	14,266	---	---	14,266
Colombia	12,277	---	---	12,277
Costa Rica	2,429	---	---	2,429
Dominican Rep.	4,413	---	---	4,413
Ecuador	5,951	---	---	5,951
Egypt	3,122	---	26,681	29,803
El Salvador	2,411	---	---	2,411
Ethiopia	285	---	---	285
France	5,392	---	---	5,392
Germany, West	6,381	---	---	6,381
Ghana	1,391	---	---	1,391
Guatemala	2,579	---	---	2,579
Guyana	1,638	---	---	1,638
Haiti	1,485	---	531	2,016
Honduras	1,611	---	514	2,125
Hong Kong	2,939	---	---	2,939
India	124,977	---	36,978	161,955
Indonesia	3,040	---	---	3,040
Iran	58,486	---	---	58,486
Iraq	16,441	---	---	16,441
Israel	9,761	---	2,324	12,085
Italy	13,413	---	---	13,413
Jamaica	1,935	---	---	1,935
Japan	114,407	---	---	114,407
Jordan	---	---	2,591	2,591
Korea	61,284	---	---	61,284
Lebanon	3,048	---	---	3,048
Liberia	162	---	---	162
Madeira Islands	438	---	---	438
Malaysia	624	---	---	624
Mexico	22,940	---	---	22,940
Morocco	14,968	---	---	14,968
Mozambique	616	---	---	616
Netherlands	37,999	---	---	37,999
Neth. Antilles	278	---	---	278
New Zealand	515	---	---	515
Nicaragua	1,568	---	---	1,568
Niger	199	---	---	199
Nigeria	8,838	---	---	8,838
Norway	146	---	---	146
Pakistan	19,624	---	16,470	36,094
Panama	2,067	---	---	2,067
Peoples Rep. of China	54,842	---	---	54,842
Peru	19,421	3,473	---	22,894
Philippines	10,917	---	---	10,917
Poland	1,926	---	---	1,926
Portugal	11,608	---	---	11,608
Sierra Leone	713	---	---	713
Singapore	502	---	---	502
Spain	808	---	---	808
Sudan	2,757	---	220	2,977
Surinam	304	---	---	304
Syrian Arab Republic	2,489	---	1,319	3,808
Tanzania	57	---	---	57
Thailand	1,879	---	---	1,879
Trinidad	3,225	---	---	3,225
Tunisia	6,035	---	---	6,035
Turkey	26,904	---	---	26,904
United Kingdom	6,472	---	---	6,472
USSR	36,021	---	---	36,021
Venezuela	21,293	---	---	21,293
Vietnam	---	---	1,736	1,736
Yemen	1,272	---	---	1,272
Yemen Arab Republic	429	---	---	429
Yugoslavia	2,706	---	---	2,706
Zaire	2,055	---	---	2,055
Grand total	866,395	4,752	122,689	993,836

Based on weekly reports of inspections for export by licensed grain inspectors and does not include rail and truck movement to Canada or Mexico.

Table 5 --Wheat: Inspections for export by class and country of destination, July-June 1974/75

Country	Hard red spring	Hard red winter	Soft red winter	White	Durum	Mixed	Total
	----- 1,000 bushels -----						
Afghanistan	---	73	---	---	---	---	73
Algeria	329	5,784	606	---	20,194	---	26,913
Azores	---	325	---	---	---	---	325
Bangladesh	256	7,417	8,205	5,438	---	4,321	25,637
Belgium	2,806	1,601	---	---	956	---	5,363
Bolivia	---	978	---	---	---	---	978
Brazil	---	21,300	---	---	---	---	21,300
Chile	---	19,431	---	---	---	---	19,431
China (Taiwan)	3,312	6,946	---	4,008	---	---	14,266
Colombia	---	11,945	332	---	---	---	12,277
Costa Rica	1,248	643	---	434	104	---	2,429
Dominican Republic	2,414	1,348	651	---	---	---	4,413
Ecuador	2,639	3,250	62	---	---	---	5,951
Egypt	---	4,933	20,950	3,040	---	880	29,803
El Salvador	1,364	112	232	616	67	20	2,411
Ethiopia	---	285	---	---	---	---	285
France	---	566	---	---	4,826	---	5,392
Germany, West	3,625	187	---	103	2,466	---	6,381
Ghana	1,194	197	---	---	---	---	1,391
Guatemala	1,083	964	523	---	9	---	2,579
Guyana	93	1,444	---	---	---	101	1,638
Haiti	1,571	445	---	---	---	---	2,016
Honduras	420	1,607	48	---	50	---	2,125
Hong Kong	1,686	39	---	1,214	---	---	2,939
India	---	125,472	3,841	30,702	---	1,940	161,955
Indonesia	1,351	188	1,501	---	---	---	3,040
Iran	---	20,635	---	37,851	---	---	58,486
Iraq	---	12,578	---	3,863	---	---	16,441
Israel	---	11,399	686	---	---	---	12,085
Italy	1,038	---	863	---	11,512	---	13,413
Jamaica	1,700	235	---	---	---	---	1,935
Japan	29,129	47,284	26	36,840	1,128	---	114,407
Jordan	---	2,591	---	---	---	---	2,591
Korea	2,418	21,057	---	37,809	---	---	61,284
Lebanon	---	3,048	---	---	---	---	3,048
Liberia	68	94	---	---	---	---	162
Madeira Island	---	404	---	---	34	---	438
Malaysia	475	---	---	149	---	---	624
Mexico	---	16,720	6,220	---	---	---	22,940
Morocco	---	3,524	10,954	490	---	---	14,968
Mozambique	---	616	---	---	---	---	616
Netherlands	25,899	7,426	231	261	4,182	---	37,999
Neth. Antilles	188	90	---	---	---	---	278
New Zealand	---	515	---	---	---	---	515
Nicaragua	1,047	357	164	---	---	---	1,568
Niger	---	199	---	---	---	---	199
Nigeria	1,945	6,297	596	---	---	---	8,838
Norway	---	---	---	---	146	---	146
Pakistan	---	3,452	11,224	21,418	---	---	36,094
Panama	1,750	---	317	---	---	---	2,067
Peoples Rep. of China	---	7,725	47,117	---	---	---	54,842
Peru	4,916	17,978	---	---	---	---	22,894
Philippines	7,509	162	---	3,222	24	---	10,917
Poland	---	1,926	---	---	---	---	1,926
Portugal	---	10,062	---	---	1,546	---	11,608
Sierra Leone	175	406	---	---	---	132	713
Singapore	502	---	---	---	---	---	502
Spain	---	---	---	---	808	---	808
Sudan	---	2,977	---	---	---	---	2,977
Surinam	40	264	---	---	---	---	304
Syrian Arab Republic	---	309	3,499	---	---	---	3,808
Tanzania	---	---	57	---	---	---	57
Thailand	1,145	279	---	455	---	---	1,879
Trinidad	942	2,152	131	---	---	---	3,225
Tunisia	---	4,467	1,568	---	---	---	6,035
Turkey	---	9,146	14,101	3,657	---	---	26,904
United Kingdom	2,733	3,501	157	---	81	---	6,472
USSR	---	36,021	---	---	---	---	36,021
Venezuela	16,707	3,180	671	---	735	---	21,293
Vietnam	397	977	---	362	---	---	1,736
Yemen	---	1,272	---	---	---	---	1,272
Yemen Arab Republic	---	429	---	---	---	---	429
Yugoslavia	---	---	2,706	---	---	---	2,706
Zaire	---	2,055	---	---	---	---	2,055
Grand total	126,114	481,289	138,239	191,932	48,868	7,394	993,836

Agricultural Marketing Service, Grain Division.

Table 6 --Wheat: Cash prices for leading classes at major markets, 1973-75 1/

Major Market and year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Simple average
	Dollars per bushel												
<u>No. 1 HRW, Kansas City</u>													
<u>Ordinary protein</u>													
1973/74	2.90	4.67	5.01	4.67	4.78	5.22	5.68	5.82	5.01	4.97	3.59	4.05	4.62
1974/75	4.36	4.33	4.35	4.94	4.88	4.66	4.15	3.93	3.69	3.66	3.34	3.23	4.13
<u>1 3/4% protein</u>													
1973/74	3.06	4.74	5.04	4.70	4.78	5.23	5.68	5.86	5.13	4.24	3.76	4.47	4.72
1974/75	4.78	4.74	4.85	5.47	5.36	5.15	4.64	4.31	4.08	4.07	3.77	3.81	4.59
<u>No. 2 SRW, Chicago</u>													
1973/74	3.08	4.75	5.11	4.75	5.47	5.84	6.30	6.50	5.59	4.33	3.48	3.91	4.93
1974/75	4.40	4.34	4.41	5.03	4.86	4.60	4.02	3.84	3.62	3.63	3.25	3.03	4.09
<u>No. 2 SRW, St. Louis</u>													
1973/74	2.91	4.37	4.94	4.53	4.69	5.46	6.22	5.96	5.08	4.02	3.31	3.84	4.61
1974/75	4.35	4.24	4.36	4.86	4.70	4.57	4.04	3.86	3.68	3.58	3.20	2.94	4.03
<u>No. 2 SRW, Toledo</u>													
1973/74	3.10	4.71	5.07	4.70	5.22	5.50	6.18	6.52	5.50	4.17	3.27	3.77	4.81
1974/75	4.29	4.28	4.33	4.93	4.81	4.59	4.00	3.83	3.60	3.52	3.07	2.96	4.02
<u>No. 2 SW, Toledo</u>													
1973/74	3.10	4.76	5.14	4.71	5.22	5.50	6.18	6.52	5.60	3.91	3.27	3.75	4.80
1974/75	4.24	4.22	4.22	4.78	4.63	4.44	3.85	3.67	3.44	3.37	2.95	2.85	3.89
<u>No. 1 SW, Portland</u>													
1973/74	3.43	4.88	5.20	4.95	4.81	5.27	5.72	6.01	5.26	4.19	3.69	4.30	4.81
1974/75	4.66	4.57	4.57	5.17	5.16	5.06	4.45	4.15	3.94	3.88	3.48	3.33	4.37
<u>No. 1 DK. NS, Minneapolis</u>													
<u>Ordinary protein</u>													
1973/74	2.99	4.36	4.47	4.37	4.47	4.99	5.52	5.80	5.23	4.16	3.97	4.51	4.57
1974/75	4.76	4.65	4.62	5.25	5.42	5.06	4.39	4.12	4.05	4.03	4.15	3.73	4.52
<u>1 5/8% protein</u>													
1973/74	3.07	4.50	4.80	4.50	4.48	4.98	5.52	5.83	5.33	4.41	4.23	5.07	4.73
1974/75	5.36	5.07	5.20	5.63	5.62	5.38	4.80	4.49	4.53	4.56	4.64	4.30	4.96
<u>Hard amber durum, Mpls.</u>													
1973/74	4.04	7.52	7.08	5.90	6.26	7.57	8.11	8.32	7.43	5.97	6.51	6.37	6.76
1974/75	7.17	6.66	6.70	7.17	7.16	6.61	5.98	6.08	5.87	6.33	6.23	5.27	6.44

1/ On-track prices established at the close of the market.

Table 7.--Wheat: Farm price, loan rate per bushel and price for equivalent quantity of major feed grain in region, 1973-75 1/

Item	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Simple average	Support rate
- - - Price for 60 pounds (bushel weight of wheat) - - -														
<u>Central and So. Plains (Hd. winter) 2/</u>														
Wheat 1973/74	2.37	4.20	4.43	4.13	4.11	4.57	5.11	5.30	4.67	3.71	3.20	3.39	4.10	1.22
Sorghum grain 1973/74	1.91	2.50	2.32	2.24	2.18	2.29	2.38	2.57	2.51	2.25	2.14	2.15	2.29	1.04
Wheat 1974/75	3.92	3.91	3.97	4.52	4.50	4.41	3.96	3.71	3.33	3.32	3.01	2.81	3.78	1.32
Sorghum grain 1974/75	2.42	3.11	3.14	3.38	3.44	3.14	2.92	2.51	2.41	2.47	2.50	2.50	2.83	1.10
<u>Cornbelt (Soft red winter) 3/</u>														
Wheat 1973/74	2.58	4.28	4.76	4.38	4.53	5.12	5.63	5.82	5.01	4.01	3.21	3.39	4.39	1.24
Corn 1973/74	2.33	3.00	2.30	2.31	2.35	2.63	2.85	3.04	2.94	2.62	2.69	2.82	2.66	1.17
Wheat 1974/75	4.00	4.02	4.00	4.58	4.44	4.28	3.86	3.71	3.32	3.28	2.92	2.71	3.76	1.39
Corn 1974/75	3.18	3.69	3.55	3.73	3.57	3.53	3.32	3.07	2.89	2.87	2.81	2.87	3.26	1.34
<u>East and South (Soft red winter) 4/</u>														
Wheat 1973/74	2.48	3.94	4.24	4.13	4.06	4.39	4.72	5.00	4.80	3.94	3.36	3.36	4.04	1.31
Corn 1973/74	2.44	3.07	2.49	2.54	2.51	2.75	2.92	3.14	3.17	2.89	2.82	2.93	2.81	1.28
Wheat 1974/75	3.72	3.86	3.83	4.14	4.14	3.99	3.76	3.52	3.26	3.26	2.99	2.70	3.60	1.38
Corn 1974/75	3.21	3.71	3.62	3.72	3.67	3.62	3.51	3.32	3.07	3.11	3.03	3.00	3.38	1.35
<u>Northern Plains (Spring and durum) 5/</u>														
Wheat 1973/74	2.53	4.51	4.55	4.10	4.11	4.81	5.34	5.57	5.17	4.23	3.85	4.27	4.42	1.31
Barley 1973/74	1.62	2.35	2.38	2.46	2.32	2.46	2.59	3.00	3.24	2.59	2.58	2.80	2.53	1.01
Wheat 1974/75	4.80	4.64	4.66	5.16	5.33	4.99	4.48	4.27	4.04	4.18	4.01	3.74	4.52	1.39
Barley 1974/75	2.96	3.42	3.55	4.04	4.44	4.22	4.11	3.89	3.34	3.55	3.51	3.00	3.67	1.00
<u>Pacific Northwest (White) 6/</u>														
Wheat 1973/74	2.89	4.67	4.86	4.67	4.43	4.85	5.49	5.71	5.13	4.00	3.43	3.80	4.49	1.25
Barley 1973/74	2.46	3.00	3.00	3.05	2.88	2.99	3.26	3.35	3.30	2.79	2.78	2.82	2.97	1.15
Wheat 1974/75	4.24	4.21	4.21	4.78	4.78	4.63	4.25	3.97	3.53	3.52	3.17	2.98	4.02	1.41
Barley 1974/75	3.04	3.61	3.69	3.85	4.25	4.14	3.94	3.46	2.99	3.20	3.12	3.01	3.53	1.26
<u>U.S. Average</u>														
Wheat 1973/74	2.47	4.45	4.62	4.22	4.20	4.78	5.29	5.52	4.96	3.98	3.52	3.57	7/3.95	1.25
Wheat 1974/75	4.04	4.24	4.32	4.85	4.87	4.65	4.11	3.95	3.65	3.69	3.47	2.92	7/4.04	1.37

1/ Simple averages with no adjustment made for relative feed value. Relative feeding value: Corn 1.00; wheat 1.05; barley .90; sorghum grain .95; reported in Consumption of Feed by Livestock, Production Research Report No. 79, ERS, USDA. 2/ Kansas, Nebraska, Texas, Oklahoma, and Colorado. 3/ Ohio, Indiana, Illinois, and Missouri. 4/ Pennsylvania, Maryland, Virginia, North Carolina, South Carolina, Georgia, Mississippi, Alabama, Louisiana, and Arkansas. 5/ North Dakota, South Dakota, and Minnesota. 6/ Washington, Oregon, and Idaho. 7/ Season average price including allowance for unredeemed loans and purchases by CCC.

Table 8.--Wheat: Monthly average gross export prices and net costs to buyer at selected ports, 1973-75 1/

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Simple Average
- - - - Cents per bushel - - - -													
GULF PORTS: NO. 2 HARD RED WINTER, ORDINARY PROTEIN													
1973/74													
Export price	320	493	524	489	495	543	588	603	529	430	382	428	485
Payment rate	---	---	---	---	---	---	---	---	---	---	---	---	---
Net cost to buyer	320	493	524	489	495	543	588	603	529	430	382	428	485
1974/75													
Export price	460	456	464	523	511	506	447	417	400	390	359	346	440
Payment rate	---	---	---	---	---	---	---	---	---	---	---	---	---
Net cost to buyer	460	456	464	523	511	506	447	417	400	390	359	346	440
BALTIMORE: NO. 1 SOFT RED WINTER													
1973/74													
Export price	322	488	516	481	483	2/	2/	2/	2/	2/	2/	456	458
Payment rate	---	---	---	---	---	---	---	---	---	---	---	---	---
Net cost to buyer	322	488	516	481	483	2/	2/	2/	2/	2/	2/	456	458
1974/75													
Export price	452	447	458	523	2/	485	427	407	385	376	330	319	419
Payment rate	---	---	---	---	---	---	---	---	---	---	---	---	---
Net cost to buyer	452	447	458	523	2/	485	427	407	385	376	330	319	419
PORTLAND: NO. 2 WESTERN WHITE													
1973/74													
Export price	363	528	557	536	512	551	601	628	557	443	390	447	509
Payment rate	---	---	---	---	---	---	---	---	---	---	---	---	---
Net cost to buyer	363	528	557	536	512	551	601	628	557	443	390	447	509
1974/75													
Export price	479	466	468	533	522	514	459	421	399	393	356	343	446
Payment rate	---	---	---	---	---	---	---	---	---	---	---	---	---
Net cost to buyer	479	466	468	533	522	514	459	421	399	393	356	343	446
DULUTH: NO. 2 NORTHERN SPRING, 14% PROTEIN													
1973/74													
Export price	318	468	495	452	454	557	608	636	527	438	417	503	489
Payment rate	---	---	---	---	---	---	---	---	---	---	---	---	---
Net cost to buyer	318	468	495	452	454	557	608	636	527	438	417	503	489
1974/75													
Export price	526	503	512	569	560	560	2/	2/	437	436	442	426	497
Payment rate	---	---	---	---	---	---	---	---	---	---	---	---	---
Net cost to buyer	526	503	512	569	560	560	2/	2/	437	436	442	426	497

1/ Export subsidies were reduced to zero on September 23, 1972. As of April 1, 1974 regulations covering export subsidy payments (GR 345-346-359) were revoked.

2/ No price quotes available.

Source: Grain Market News.

Table 9.--White pan bread: Estimated retail and wholesale price of a 1-pound loaf; retailer's, baker-wholesaler's, miller's, and other spreads; farm value of ingredients; flour and wheat prices and related data, quarterly 1971-73
(Revised, based on 1972 Census Data)

Item	Unit	1971					1972					1973				
		I	II	III	IV	Year	I	II	III	IV	Year	I	II	III	IV	Year
		:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Retail price <u>1/</u>	Cents per loaf	24.8	24.8	25.0	24.5	24.8	24.5	24.7	24.7	24.7	24.7	25.1	26.2	27.7	31.3	27.6
Retail spread <u>2/</u>	"	5.4	5.5	5.6	5.1	5.4	4.6	4.7	4.5	4.4	4.6	4.7	5.3	5.3	6.1	5.4
Wholesale price <u>3/</u>	"	19.4	19.3	19.4	19.4	19.4	19.9	20.0	20.2	20.3	20.1	20.4	20.8	22.4	25.2	22.2
Baker-wholesaler spread <u>4/</u>	"	13.8	13.6	13.8	13.8	13.8	14.2	14.3	14.2	13.7	14.1	13.6	13.7	13.9	15.8	14.2
Cost to baker:																
All ingredients <u>5/</u>	"	5.6	5.7	5.6	5.6	5.6	5.7	5.7	6.0	6.6	6.0	6.8	7.1	8.5	9.4	8.0
Flour <u>6/</u>	"	3.9	3.9	3.8	3.8	3.9	3.8	3.9	4.2	4.6	4.1	4.8	4.9	6.1	7.0	5.7
Miller's flour spread <u>7/</u>	"	3.7	3.6	3.5	3.5	3.6	3.5	3.5	3.8	4.4	3.8	4.5	4.7	5.9	6.7	5.5
Cost of wheat to miller <u>8/</u>	"	0.7	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.8	0.6	0.8	0.7	1.0	1.2	1.0
Other spreads <u>9/</u>	"	3.0	3.1	3.0	3.0	3.0	2.9	3.0	3.2	3.6	3.2	3.7	4.0	4.9	5.5	4.5
Farm value: *	"	1.4	1.6	1.6	1.6	1.5	1.5	1.6	1.6	1.4	1.6	1.4	1.5	1.5	1.5	1.5
All ingredients <u>10/</u>	"	3.5	3.6	3.5	3.5	3.5	3.6	3.6	3.8	4.4	3.8	4.6	4.9	6.0	6.7	5.5
Wheat <u>11/</u>	"	2.6	2.7	2.6	2.6	2.6	2.6	2.7	2.9	3.4	2.9	3.5	3.6	4.5	5.2	4.2
Flour prices: <u>12/</u> *																
F.o.b. mill	Dol. per cwt.	5.77	5.72	5.58	5.55	5.65	5.53	5.57	6.07	6.91	6.02	7.13	7.37	9.28	10.59	8.59
Delivered to bakers	"	6.24	6.17	6.05	6.01	6.12	6.03	6.06	6.57	7.37	6.51	7.52	7.81	9.72	11.03	9.02
Flour sales: <u>12/</u>																
Sold in bags	Percent	20	21	19	16	19	16	21	13	18	17	19	21	13	19	18
Price differential for bags	Cents per cwt.	15	15	15	15	15	15	15	17	17	16	17	18	18	22	19
Wheat prices: *																
Farm delivery point <u>13/</u>	Dol. per bu.	1.36	1.38	1.26	1.30	1.33	1.32	1.33	1.51	2.03	1.55	2.83	2.93	3.66	4.21	3.41
Delivered to miller <u>14/</u>	"	2.47	2.44	2.31	2.36	2.40	2.33	2.35	2.50	2.94	2.53	3.00	3.23	3.98	4.46	3.67

1/ Based on prices reported by Bureau of Labor Statistics. 2/ Spread between retail and wholesale prices. 3/ Estimated from BLS prices and trade data. 4/ Spread between wholesale price and cost to baker of all ingredients. 5/ Cost of flour plus shortening, nonfat dry milk, sugar, and other minor nonfarm produced ingredients. 6/ Cost or sales value of flour (0.6329 lb.) used per pound of bread. 7/ Spread between mill sales value of flour and cost of wheat to miller. The data sources used to compute this spread have been improved by using prices of bread-type flour shown below. Thus, figures for the miller's spread are not comparable with previously published data. 8/ Cost of wheat (.01445 bu.) including marketing certificate, net of imputed cost chargeable to millfeed byproducts. 9/ Charges for transporting, handling, storing all ingredients, for processing ingredients other than flour and cost of nonfarm produced ingredients such as yeast, salt, and malt extract. This spread is a residual figure. 10/ Returns to farmers for wheat including an allowance for the marketing certificate, shortening, nonfat dry milk, and sugar used in a 1-pound loaf. 11/ Returns to farmers for wheat, including the certificate, less imputed value of millfeed byproducts. 12/ Based on monthly sales and prices of bread-type flour reported by a sample of flour milling firms. 13/ Weighted average for hard winter and spring wheat in the 10 major wheat producing States. 14/ Includes allowance for marketing certificate.

*Wheat and flour prices do not include allowance for marketing certificate since July 1, 1973, effective date of repeal.

Table 10.--White pan bread: Estimated retail and wholesale price of a 1-pound loaf; retailer's, wholesaler's, miller's and other spreads; farm value of ingredients; flour and wheat prices and related data, April-June 1975 and previous 4 quarters (Revised based on 1972 Census Data)

Item	Unit	1974				1975				
		II	III	IV	I	April	May	June Preliminary	II	
Retail price <u>1/</u>	Cents per loaf	34.4	34.7	35.9	37.3	36.8	36.2	35.6	36.2	
Retail spread <u>2/</u>	"	6.1	5.6	5.7	5.6	5.2	4.7	4.2	4.7	
Wholesale price <u>3/</u>	"	28.3	29.1	30.2	31.7	31.6	31.5	31.4	31.5	
Baker-wholesaler spread <u>4/</u>	"	18.5	18.2	17.6	20.7	21.4	22.0	22.3	21.9	
Cost to baker:										
All ingredients <u>5/</u>	"	9.8	10.9	12.6	11.0	10.2	9.5	9.1	9.6	
Flour <u>6/</u>	"	6.6	7.1	7.7	6.5	6.2	5.9	5.7	5.9	
Mill sales value of flour <u>6/</u>	"	6.2	6.7	7.3	6.1	5.7	5.5	5.3	5.5	
Miller's flour spread <u>7/</u>	"	0.8	0.9	1.0	0.6	0.4	0.5	0.6	0.5	
Cost of wheat to miller <u>8/</u>	"	5.4	5.8	6.3	5.4	5.3	5.0	4.7	5.0	
Other spreads <u>9/</u>	"	2.3	2.4	2.7	2.9	2.9	2.8	2.9	2.9	
Farm value: *										
All ingredients <u>10/</u>	"	6.7	7.6	8.9	7.5	6.9	6.2	5.6	6.2	
Wheat <u>11/</u>	"	4.5	5.1	5.7	4.7	4.4	4.1	3.6	4.0	
Flour prices: <u>12/</u> *										
F.o.b. mill	Dol. per cwt.	9.77	10.53	11.45	9.57	9.10	8.72	8.37	8.73	
Delivered to bakers	"	10.37	11.13	12.15	10.21	9.75	9.32	9.08	9.38	
Flour sales: <u>12/</u>										
Sold in bags	Percent	23	17	19	20			15	22	
Price differential for bags	Cents per cwt.	27	28	32	34			35	29	
Wheat prices: *										
Farm delivery point <u>13/</u>	Dol. per bu.	3.60	4.12	4.67	3.80	3.54	3.32	2.94	3.27	
Delivered to millers	"	4.32	4.72	5.16	4.39	4.27	4.04	3.89	4.07	

1/ Based on prices reported by Bureau of Labor Statistics. 2/ Spread between retail and wholesale prices. 3/ Estimated from BIS prices and trade data. 4/ Spread between wholesale price and cost to baker of all ingredients. 5/ Cost of flour plus shortening, nonfat dry milk, sugar and other minor nonfarm produced ingredients. 6/ Cost or sales value of flour (0.6329 lb.) used per pound of bread. 7/ Spread between mill sales value of flour and cost of wheat to miller. 8/ Cost of wheat (.01445 bu.), net of imputed cost of wheat chargeable to millfeed byproducts. 9/ Charges for transporting, handling, processing ingredients other than flour and cost of nonfarm produced ingredients such as yeast, salt, and malt extract. This spread is a residual figure. 10/ Returns to farmers for wheat, shortening, nonfat dry milk, and sugar used in a 1-pound loaf. 11/ Returns to farmers for wheat, net of imputed cost of wheat chargeable to millfeed byproducts. 12/ Based on monthly sales and prices of bread-type flour reported by a sample of flour milling firms. 13/ Weighted average for hard winter and spring wheat in the 10 major wheat producing States.

*Wheat and flour prices do not include allowance for marketing certificate since July 1, 1973, effective date of repeal.

Note: Price spreads may not add due to rounding.

Table 11.--Wheat and flour: Price relationships at milling centers annual and by quarters, 1972-75

Year and month	At Kansas City					At Minneapolis				
	Cost of wheat to produce 100 lb. of flour	Wholesale price of-				Cost of wheat to produce 100 lb. of flour	Wholesale price of-			
		Bakery flour per 100 lb.	Byprod-ucts obtained 100 lb. flour	Total products			Bakery flour per 100 lb.	Byprod-ucts obtained 100 lb. flour	Total products	
				Actual	Over cost of wheat				Actual	Over cost of wheat
1/	2/	3/			1/	2/	3/			
----- Dollars -----										
<u>1972/73</u>										
July-Sept.	6.06	5.99	.81	6.80	.74	5.97	6.48	.76	7.24	1.27
Oct.-Dec.	7.15	6.80	1.19	7.99	.84	6.82	7.14	1.13	8.27	1.45
Jan.-Mar.	7.50	7.02	1.27	8.29	.79	7.05	7.34	1.22	8.56	1.51
Apr.-June	7.82	7.31	1.19	8.50	.68	7.55	7.51	1.19	8.70	1.15
Season average:	7.13	6.78	1.11	7.89	.76	6.85	7.12	1.07	8.19	1.34
<u>1973/74</u>										
July-Sept.	9.76	9.13	1.54	10.67	.91	9.36	9.54	1.50	11.04	1.68
Oct.-Dec.	11.18	10.35	1.85	12.20	1.02	10.57	10.55	1.77	12.32	1.75
Jan.-Mar.	12.67	12.85	1.65	14.50	1.83	12.64	13.00	1.59	14.59	1.95
Apr.-June	9.48	9.54	1.41	10.95	1.47	10.16	10.33	1.38	11.71	1.55
Season average:	10.77	10.47	1.61	12.08	1.31	10.68	10.85	1.56	12.41	1.73
<u>1974/75</u>										
July-Sept.	10.92	10.40	1.77	12.17	1.25	11.52	11.65	1.77	13.42	1.90
Oct.-Dec.	12.14	11.45	1.89	13.34	1.20	12.46	12.57	1.85	14.42	1.96
Jan.-Mar.	9.90	9.83	1.51	11.34	1.44	10.19	10.97	1.45	12.42	2.23
Apr.-June ^{4/}	8.86	8.54	1.40	9.94	1.08	9.88	9.92	1.42	11.34	1.46
Season average:	10.46	10.06	1.64	11.70	1.24	11.01	11.28	1.62	12.90	1.89

^{1/} Based on 73 percent extraction rate, cost of 2.28 bushels: At Kansas City, No. 1 Hard Winter, 13 percent protein, and at Minneapolis, No. 1 Dark Northern Spring, simple average of 13 percent and 15 percent protein. Beginning July 1973 excludes domestic certificate. ^{2/} Quoted as 95 percent patent at Kansas City and standard patent at Minneapolis, bulk basis. ^{3/} Assumed 50-50 millfeed distribution between bran and shorts or middlings, bulk basis. ^{4/} Preliminary.

Compiled from reports of Agricultural Marketing Service and Bureau of Labor Statistics, Department of Labor.

Table 12.--Cereal and bakery products: Retail price index, 1965-75

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
(Index 1967 = 100)													
1965	93.8	93.4	93.6	93.7	93.5	93.7	93.8	93.8	93.9	93.9	94.0	94.7	93.8
1966	95.4	95.5	95.9	96.3	96.5	96.8	96.9	99.0	99.9	99.8	100.1	100.3	97.7
1967	100.3	100.0	100.1	100.0	100.3	99.8	99.7	99.9	99.9	99.7	99.9	99.9	100.0
1968	99.8	99.7	99.7	99.8	99.9	100.1	100.6	100.9	101.1	101.1	101.4	101.4	100.4
1969	101.7	101.9	102.3	102.4	102.6	103.0	103.5	103.5	103.8	104.4	104.7	105.4	103.3
1970	105.9	106.6	107.2	107.7	108.0	108.2	108.7	109.8	110.2	111.0	111.2	111.6	108.9
1971	112.4	112.8	113.0	113.9	114.1	114.2	114.8	114.5	114.6	114.3	114.1	113.8	113.9
1972	113.7	114.3	114.8	115.0	114.7	114.5	114.4	114.4	114.6	114.6	115.0	115.8	114.7
1973	116.3	117.8	119.0	120.2	122.1	123.0	123.5	124.7	132.4	139.0	145.8	148.5	127.7
1974	149.7	154.4	158.6	161.4	164.3	165.3	166.7	168.2	170.4	174.7	177.6	181.7	166.1
1975	185.3	187.3	189.1	188.9	187.0	185.2							

Bureau of Labor Statistics, U.S. Department of Labor.

Table 13.--Wheat: Rotterdam, c.i.f., quotations for cargoes/parcels
in nearest shipment position, by months, 1971-75

Year beginning	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Simple average
- - - - Dollars per bushel - - - -													
Canadian No. 1 CWRS - 14 - 1/													
1971	1.94	1.94	1.95	1.96	2.00	2.01	2.01	1.98	1.98	1.99	1.98	1.97	1.98
1972	1.97	1.99	2.54	2.73	2.76	2.87	3.15	3.14	3.12	3.18	3.30	3.90	2.89
1973	4.54	2/5.50	6.20	5.07	5.58	6.04	6.41	6.51	6.74	5.63	5.10	5.32	5.80
1974	5.78	5.75	5.77	6.44	6.43	6.31	5.67	5.41	4.96	5.24	5.08	5.26	5.68
United States No. 2 Hard Winter, 12%													
1971	1.80	1.77	1.76	1.74	1.79	1.76	1.76	1.74	1.75	1.76	1.77	1.76	1.76
1972	1.76	1.78	2.27	2.54	2.53	2.97	2.98	2.67	2.67	2.79	3.09	3.52	2.63
1973	3.97	5.24	5.48	5.27	5.45	6.25	6.26	6.32	6.12	5.00	4.64	3/4.82	5.40
1974	5.19	5.28	5.54	6.25	6.23	5.97	5.30	4.88	4.53	4.54	3.98	4.00	5.14
United States Dark Northern Spring, 15%													
1971	1.97	1.97	1.98	2.00	2.02	2.00	1.98	1.97	1.98	1.97	1.99	1.94	1.98
1972	1.93	1.97	2.33	2.52	2.50	2.87	3.18	2.97	2.80	2.90	3.23	4/3.58	2.73
1973	3.92	5.34	5.46	5.23	5.41	6.29	6.42	6.29	6.08	5.06	4.79	5.26	5.47
1974	5.68	5.53	5.63	6.34	6.36	6.20	5.55	5.24	4.80	4.84	4.58	4.51	5.44

1/ Prior to September 1971 Canada No. 2 Manitoba.

2/ Effective August 1973 - Canadian Western Spring Wheat (CWRS)--No. 1--13.5 protein.

3/ Effective June 1974, 13.5 percent.

4/ Effective June 1973, 14 percent.

Table 14.--Wheat: Price support activity, cumulative, by months 1970-75 crops ^{1/}

Item	Unit	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1970													
Placed under loan ^{2/}	Mil. bu.	126	160	194	213	221	226	241	244	248	251	254	254
Redeemed by farmers	"	---	---	42	60	75	87	106	122	138	152	163	167
Net under loan	"	126	160	152	153	146	139	135	122	110	99	91	87
Price above or below loan (\$1.25)	Dol.	-.02	.06	.16	.18	.20	.16	.15	.16	.14	.15	.18	.21
1971													
Placed under loan ^{2/}	Mil. bu.	77	134	252	318	343	359	409	420	427	434	437	438
Redeemed by farmers	"	---	---	6	14	27	44	71	91	135	182	207	227
Net under loan	"	77	134	246	304	316	315	338	329	292	252	230	211
Price above or below loan (\$1.25)	Dol.	.09	.03	.01	.05	.06	.09	.08	.09	.09	.11	.13	.08
1972													
Placed under loan ^{2/}	Mil. bu.	59	78	104	122	130	135	141	142	143	143	143	143
Redeemed by farmers	"	---	---	39	45	51	61	78	87	97	106	119	128
Net under loan	"	59	78	65	77	79	74	63	55	46	37	24	15
Price above or below loan (\$1.25)	Dol.	.07	.26	.48	.64	.72	1.13	1.13	.72	.81	.90	.90	1.18
1973													
Placed under loan ^{2/}	Mil. bu.	32	42	51	55	58	60	60	60	60	60	60	60
Redeemed by farmers	"	3	14	18	21	25	32	56	58	59	60	60	60
Net under loan	"	29	28	33	34	33	28	4	2	1	3/	3/	3/
Price above or below loan (\$1.25)	Dol.	1.22	3.20	3.37	2.97	2.95	3.53	4.04	4.27	3.71	2.73	2.27	2.32
1974													
Placed under loan ^{2/}	Mil. bu.	14	22	29	31	32	34	35	36	36	36	36	36
Redeemed by farmers	"	3/	2	4	8	11	13	17	19	22	26	32	35
Net under loan	"	14	20	25	23	21	21	18	17	14	10	4	1
Price above or below loan (\$1.37)	Dol.	2.67	2.87	2.95	3.48	3.50	3.28	2.74	2.58	2.28	2.32	2.10	1.55

1/ Based on operating reports.

2/ Includes direct purchases.

3/ Less than 500,000 bushels.

Table 15.--All wheat; winter and spring: Acreage, yield and production
United States, 1970-75

Year of harvest	All wheat					Winter wheat				
	Acreage		Yield per harvested acre	Production		Acreage		Yield per harvested acre	Production	
	Planted	Harvested				Planted	Harvested			
	1,000 acres	Bushels	1,000 bushels		1,000 acres	Bushels	1,000 bushels			
1970	48,739	43,564	31.0	1,351,558	37,623	32,702	33.4	1,091,744		
1971	53,810	47,674	33.9	1,617,789	38,060	32,359	35.4	1,144,164		
1972	54,896	47,284	32.7	1,544,936	42,166	34,840	34.0	1,185,225		
1973	58,978	53,869	31.7	1,705,167	43,232	38,474	33.1	1,272,744		
1974 1/	71,169	65,459	27.4	1,793,322	52,407	47,117	29.5	1,391,303		
1975 2/	74,406	69,029	31.7	2,187,489	55,848	50,876	32.2	1,636,524		

	All spring wheat			Durum			Spring other than durum					
	Acreage		Yield per harvested acre	Production	Acreage		Yield per harvested acre	Production	Acreage		Yield per harvested acre	Production
	Planted	Harvested			Planted	Harvested			Planted	Harvested		
	1,000 acres	Bushels	1,000 bushels	1,000 acres	Bushels	1,000 bushels	1,000 acres	Bushels	1,000 bushels	1,000 acres	Bushels	1,000 bushels
1970	11,116	10,862	23.9	259,814	2,167	2,105	25.1	52,771	8,949	8,757	23.6	207,043
1971	15,750	15,315	30.9	473,625	2,943	2,864	32.1	91,805	12,807	12,451	30.7	381,820
1972	12,730	12,444	28.9	359,711	2,592	2,550	28.6	72,912	10,138	9,894	29.0	286,799
1973	15,746	15,395	28.1	432,423	2,952	2,884	27.2	78,455	12,794	12,511	28.3	353,968
1974 1/	18,762	18,342	21.9	402,019	4,074	3,999	19.8	79,245	14,688	14,343	22.5	322,774
1975 2/	18,558	18,153	30.4	550,965	4,599	4,514	29.5	133,068	13,959	13,639	30.6	417,897

1/ Preliminary.
2/ Indicated as of July 1.

Table 16.--Wheat: CCC operations and privately held stocks, 1970-74

Crop year	Placed under price support			Delivered to CCC 1/	Total carry-over 2/	At year end-June 30					Privately held stocks 3/
	Loans	Direct purchases	Total			CCC-owned or under loan					
						Stocks owned by CCC	Under loan from		Sealed under bond	Total	
				Current crop	Previous crop						
	----- Million bushels -----										
1970/71	254.2	4/	254.2	5.2	731.5	369.9	73.5	118.2	8	569.6	161.9
1971/72	438.1	22.5	460.6	35.1	863.1	367.4	190.4	143.6	13	714.4	148.7
1972/73	143.0	24.1	167.1	24.1	438.5	144.1	10.8	45.6	11	211.5	227.0
1973/74	59.9	---	59.9	---	247.4	18.9	.1	.1	---	19.1	228.3
1974/75	36.5	---	36.5	---	319.3	1.1	1.3	---	---	2.4	316.9

1/ Includes direct purchases and collateral acquired, also may include some new crop wheat.
2/ Carryover refers to the end of the crop year.
3/ Derived by subtracting CCC stocks, loans outstanding, and sealed under bond from total carryover.
4/ Less than 50,000 bushels.

Table 17.--Wheat: Stocks, United States, by quarters, 1971-75

Year	January 1				April 1			
	On farms	Off farm mills, elevators and warehouses 1/	Commodity Credit Corporation 2/	Total all positions	On farms	Off farm mills, elevators and warehouses 1/	Commodity Credit Corporation 2/	Total all positions
1971	526,092	881,946	1,932	1,409,970	381,098	677,407	1,930	1,060,435
1972	694,191	851,077	2,023	1,547,291	525,478	682,983	1,978	1,210,439
1973	509,808	886,974	1,827	1,398,609	315,926	609,431	1,822	927,179
1974	363,323	562,139	1,813	927,275	181,328	365,000	1,441	547,769
1975 3/	440,196	661,171	---	1,101,367	260,207	387,982	---	648,189

Year	July 1				October 1			
	On farms	Off farm mills, elevators and warehouses 1/	Commodity Credit Corporation 2/	Total all positions	On farms	Off farm mills, elevators and warehouses 1/	Commodity Credit Corporation 2/	Total all positions
1971	240,276	489,388	1,814	731,478	826,402	1,045,046	1,886	1,873,334
1972	354,869	506,297	1,906	863,072	729,492	1,138,841	1,858	1,870,191
1973	133,876	302,759	1,819	438,454	606,132	841,267	1,817	1,449,216
1974	89,200	157,907	294	247,401	668,419	881,629	35	1,550,084
1975 3/	125,858	193,403	---	319,261				

1/ All off-farm storages not otherwise designated, including flour mills, terminal elevators and processing plants.
2/ Wheat owned by CCC and stored in bins or other storage owned or controlled by CCC. Other wheat owned by CCC as well as wheat outstanding under loan is included in other positions.
3/ Preliminary.

Table 18.--Wheat: Supply and disappearance, United States, Canada, Australia, and Argentina, average 1960-64 and 1965-69, annual 1971-75

Crop year	Supply			Disappearance	
	Beginning carryover ^{1/}	Production	Total ^{2/}	Domestic	Exports including flour
----- Million bushels -----					
United States					
Year beginning July 1					
Average					
1960-64	1,228	1,222	2,455	605	721
1965-69	626	1,426	2,054	709	705
1971	731	1,618	2,350	855	632
1972	863	1,545	2,409	785	1,186
1973	438	1,705	2,147	752	1,148
1974 ^{3/}	247	1,793	2,040	684	1,039
1975 ^{4/}	319	2,187	2,507	809-784	1,050-1,200
Canada					
Year beginning August 1					
Average					
1960-64	509	538	1,047	149	406
1965-69	604	678	1,282	162	417
1971	734	530	1,264	176	504
1972	584	533	1,117	175	577
1973	365	605	970	165	420
1974 ^{3/}	385	522	907	228	415
1975 ^{4/}	264	612	876	189	446
Australia					
Year beginning December 1					
Average					
1960-64	29	305	334	78	234
1965-69	88	387	475	97	242
1971	134	313	447	103	286
1972	58	236	294	116	157
1973	21	437	458	128	257
1974 ^{3/}	73	430	503	128	349
1975 ^{4/}	26	350	376	132	220
Argentina					
Year beginning December 1					
Average					
1960-64	36	263	299	135	113
1965-69	37	238	279	152	109
1971	25	209	234	160	60
1972	14	254	268	154	121
1973	10	241	251	156	57
1974 ^{3/}	38	209	247	158	78
1975 ^{4/}	11	228	239	158	70

^{1/} From previous crops for the U.S. and Canada farm stocks are included; net changes in farm stocks for Australia and Argentina are reflected in domestic disappearance.

^{2/} Total supply includes imports.

^{3/} Preliminary.

^{4/} Estimated.

Compiled from records of Foreign Agricultural Service, Grain and Feed Division.

Table 19.--Wheat and Wheat Flour: World trade, production, stocks and consumption for 1972/73, 1973/74, 1974/75, and projected levels for 1975/76, years beginning July 1

Country or region	1972/73	1973/74	1974/75	Projected for 1975/76	
				As of April 15*	As of July 15
----- Million metric tons -----					
Exports:					
Canada	15.6	11.7	11.3	---	12.5
Australia	5.6	5.3	8.4	} 21.5	8.0
Argentina	3.5	1.1	2.2		---
Sub-total	24.7	18.1	21.9	21.5	22.5
W. Europe	12.2	12.3	12.8	14.6	14.2
(Excluding intra EC-9)	(6.9)	(5.8)	(8.4)	(8.7)	(9.3)
USSR	1.3	5.0	4.0	4.0	3.5
All Others	2.8	2.1	1.5	1.6	1.4
Total non-U.S...	41.0	37.5	40.2	41.7	41.6
USA 1/	31.8	31.1	28.3	30.3	2/30.3
World total	72.8	68.6	68.5	72.0	71.9
(World total excluding intra EC-9)	(67.5)	(62.1)	(64.1)	(66.1)	(67.0)
Imports:					
W. Europe	13.5	12.9	11.0	11.5	11.5
(Excluding intra EC-9)	(8.2)	(6.4)	(6.6)	(5.6)	(6.6)
USSR	14.9	4.4	2.5	2.0	7.0
Japan	5.5	5.4	5.4	5.4	5.5
E. Europe	4.7	5.3	4.1	} 53.1	4.7
China, People's Rep. of	5.3	5.6	5.7		4.5
All Others	28.9	35.0	39.8	38.7	38.7
World total	72.8	68.6	68.5	72.0	71.9
(World total excluding intra EC-9)	(67.5)	(62.1)	(64.1)	(66.1)	(67.0)
Production: 3/					
Canada	14.5	16.5	14.2	17.0	16.6
Australia	6.4	11.9	11.7		9.0
Argentina	6.9	6.6	5.7	18.7	6.2
W. Europe	51.4	50.8	56.2	53.1	51.5
USSR	86.0	109.8	83.8	95.0	90.0
E. Europe	30.7	31.7	34.0	31.2	31.2
India	26.4	24.7	22.1	23.5	25.8
All other foreign	74.7	68.4	73.4	78.5	74.1
Total foreign	297.0	320.4	301.1	317.0	304.4
USA	42.0	46.4	48.8	57.8	2/59.5
World total	339.0	366.8	349.9	374.8	363.9
Consumption: 4/					
USA	21.4	20.4	19.2	21.9	2/21.7
USSR 5/	99.6	100.2	88.8	92.0	96.0
All other foreign	239.9	242.8	246.8	249.9	246.5
World total	360.9	363.4	354.8	363.8	364.2
Stocks, ending: 6/					
World total	51.7	57.1	52.6	59.5	52.3

1/ Includes transshipments through Canadian ports, excludes products other than flour.

2/ U.S. production, trade, and consumption projections for 1975/76 are mid-points of the official range estimates.

3/ Production data includes all harvests occurring within the July-June year shown, except that small grain crops from the early-harvesting Northern Hemisphere areas are "moved forward"; i.e.; the May 1974 harvests in areas such as India, North Africa, and southern USA are actually included in "1974/75" accounting period which begins July 1, 1974.

4/ Consumption data are based on an aggregate of differing local marketing years. For countries for which stocks data are not available, consumption estimates represent "apparent" consumption, i.e., they are inclusive of annual stock level adjustments.

5/ Includes estimated waste due to excess moisture and foreign material.

6/ Stocks data are based on an aggregate of differing local marketing years and should not be construed as representing world stock levels at a fixed point in time. Stocks data are only for selected countries and exclude such important countries as the USSR, the People's Republic of China, and part of Eastern Europe for which stocks data are not available; the aggregate stocks level have, however, been adjusted for estimated year-to-year changes in USSR grain stocks.

*A statistical revision to PRC production and consumption figures has been incorporated in order to allow comparability.

Table 20.--Wheat: World wheat supply and distribution, marketing years 1965-75 1/

Year	Area Harvested	Yield	Beginning Stocks 2/	Production	Total Exports	Consumption Total 3/
	Million Ha.	Qu./Ha.		Million metric tons		
1965/66	216.8	12.3	72.0	265.8	61.1	284.6
1966/67	214.8	14.3	53.2	307.5	57.3	282.7
1967/68	219.4	13.5	78.0	295.8	53.1	292.0
1968/69	224.7	14.6	81.8	328.4	50.0	303.2
1969/70	217.7	14.2	107.0	309.5	55.3	322.8
1970/71	206.0	15.2	93.7	313.8	56.3	335.0
1971/72	211.5	16.4	72.5	346.2	56.2	345.1
1972/73	208.7	16.2	73.6	339.0	72.3	360.9
1973/74 4/	216.9	17.0	51.7	368.8	70.2	363.4
1974/75 5/	220.8	15.9	57.1	350.3	68.6	354.8
1975/76 5/	223.7	16.4	52.6	6/ 363.9	71.9	364.2

1/ Data in this table are based on an aggregate of differing local marketing years, and will therefore differ from July-June data appearing elsewhere in this report.

2/ Stocks data are only for selected countries and exclude such important countries as USSR, the People's Republic of China, and part of Eastern Europe for which stocks data are not available; the aggregate stocks levels have, however, been adjusted for estimated year-to-year changes in USSR grain stocks.

3/ For countries for which stock data are not available, or for which no adjustments have been made for year-to-year changes, consumption estimates assume a constant stock level.

4/ Preliminary.

5/ Projected.

6/ Based on mid-July estimates.

Source: Foreign Agricultural Service

Table 21.--Wheat: World wheat and flour trade (grain equivalent), year beginning July, 1966-75 1/

Region and country	1966	1967	1968	1969	1970	1971	1972	1973	Est. 1974	Proj. 1975
	Million metric tons									
Exports										
Canada	14.8	8.9	8.7	9.0	12.6	15.8	15.6	11.7	11.3	12.5
Australia	6.9	7.0	5.4	7.4	9.5	8.7	5.6	5.3	8.4	8.0
Argentina	3.1	1.4	2.7	2.1	1.6	1.3	3.5	1.1	2.2	2.0
Sub-total	24.8	17.3	16.8	18.5	23.7	25.8	24.7	18.1	21.9	22.5
West Europe	5.8	7.7	9.3	11.1	6.5	8.7	12.2	12.3	12.8	14.2
East Europe	1.7	2.3	2.0	1.3	.9	.9	.9	1.4	1.2	1.2
USSR	4.4	5.3	5.8	6.4	7.2	5.8	1.3	5.0	4.0	3.5
Other	.7	.7	.6	.8	.4	.6	1.9	.7	.3	.2
Total non-U.S.	37.4	33.3	34.5	38.1	38.7	41.8	41.0	37.5	40.2	41.6
United States	20.0	20.2	14.7	16.5	19.8	16.9	31.8	31.1	28.3	30.3
Total	57.4	53.5	49.2	54.6	58.5	58.7	72.8	68.6	68.5	71.9
Imports										
Japan	4.3	4.0	4.2	4.4	4.8	5.0	5.5	5.4	5.4	5.5
West Europe	10.9	10.3	12.8	12.7	13.7	12.1	13.5	12.9	11.0	11.5
East Europe	5.4	4.9	4.3	4.7	6.7	5.2	4.7	5.6	4.1	4.7
USSR	3.1	1.5	.2	1.1	.5	3.4	14.9	4.4	2.5	7.0
China, People's Rep. of	5.0	4.2	3.5	5.1	3.7	3.0	5.3	5.6	5.7	4.5
Sub-total	28.7	24.9	25.0	28.0	29.4	28.7	43.9	33.9	28.7	33.2
Africa 2/	6.0	5.6	3.7	3.8	5.2	5.4	5.2	6.9	7.0	8.1
Latin America 3/	4.6	5.1	4.3	3.9	3.9	4.5	6.2	6.2	5.2	5.1
West Asia 4/	2.0	1.7	1.8	2.4	2.8	4.6	2.0	3.2	5.5	4.2
South Asia 5/	9.1	9.3	5.4	5.4	4.4	4.8	5.8	8.0	10.8	11.9
Other Asia 6/	1.4	1.9	2.3	2.8	3.0	3.1	3.0	2.9	2.7	2.9
Others	5.6	5.0	6.7	8.3	9.8	7.6	6.7	7.5	8.6	6.5
Total	57.4	53.5	49.2	54.6	58.5	58.7	72.8	68.6	68.5	71.9

1/ Data include intra-EC-9 trade, but exclude products other than flour in grain equivalent; U.S. data also adjusted for transshipments through Canada.

2/ Algeria, Egypt, Libya, Morocco, Nigeria, South Africa, Sudan, and Tunisia.

3/ Mexico, Brazil, Chile, Colombia, Peru and Venezuela.

4/ Iran, Iraq, Israel, Jordan, Lebanon, Saudi Arabia, Syria and Turkey.

5/ Bangladesh, India, Indonesia, Pakistan, and Sri Lanka.

6/ Philippines, Taiwan, and South Korea.

Source: Foreign Agricultural Service.

Table 22.--Rye: United States supply, distribution and prices
average 1965-69, annual 1973-75

Item	Year beginning July			
	Average 1965-69	1973	1974 ^{1/}	1975 ^{2/}
- - - - Million bushels - - - -				
<u>Supply</u>				
Carryover on July 1	16.9	33.3	11.0	5.9
Production	27.6	26.3	19.3	18.8
Imports	1.2	3/	.2	.2
Total	45.7	59.6	30.5	24.9
<u>Disappearance</u>				
<u>Domestic</u>				
Food	5.4	6.2	5.4	5.5
Seed	5.6	4.9	4.5	5.3
Industry	4.6	2.4	1.4	1.3
Feed (Residual) ^{4/}	9.0	8.3	9.4	5.0
Total	24.6	21.8	20.7	17.1
<u>Exports</u>	2.6	26.8	3.9	3.0
Total disappearance	27.2	48.6	24.6	20.1
Ending carryover June 30	18.5	11.0	5.9	4.8
Privately owned--"Free"	(7.4)	(8.3)	(5.8)	
National average loan rate	1.02	.89	.89	.89
Price received by farmers	1.03	1.91	2.46	

^{1/} Preliminary.

^{2/} Projected. Imports and distribution items are partly estimated.

^{3/} Negligible.

^{4/} Residual item; roughly approximates total feed use.

Table 23.--Rye: U.S. supply and disappearance, average 1965-69, by quarters, 1971-75

Year and quarter	Beginning stocks	Production	Imports	Total supply	Exports	Domestic					Total disappearance	Ending stocks
						Food	Seed	Industry	Feed 1/	Total		
----- 1,000 bushels -----												
Average 1965-69												
July-Sept.	16,901	27,644	247	44,792	756	1,369	2,581	871	3,992	8,813	9,569	35,223
Oct.-Dec.	35,223		284	35,507	491	1,410	2,581	1,196	2,153	7,340	7,831	27,676
Jan.-Mar.	27,676		179	27,855	316	1,400	281	1,374	1,184	4,239	4,555	23,300
Apr.-June	23,300		452	23,752	998	1,223	168	1,111	1,696	4,198	5,196	18,556
Season	16,901	27,644	1,162	45,707	2,561	5,402	5,611	4,552	9,025	24,590	27,151	18,556
1971/72												
July-Sept.	27,876	49,288	131	77,295	1,604	1,380	2,421	544	6,576	10,921	12,525	64,770
Oct.-Dec.	64,770		110	64,880	143	1,363	2,420	816	5,518	10,117	10,260	54,620
Jan.-Mar.	54,620		---	54,620	4	1,334	263	997	2,690	5,284	5,288	49,332
Apr.-June	49,332		---	49,332	---	1,134	158	709	1,697	3,698	3,698	45,634
Season	27,876	49,288	241	77,405	1,751	5,211	5,262	3,066	16,481	30,020	31,771	45,634
1972/73												
July-Sept.	45,634	29,183	154	74,971	17	1,178	2,448	353	9,049	13,028	13,045	61,926
Oct.-Dec.	61,926		---	61,926	174	1,225	2,447	780	3,328	7,780	7,954	53,972
Jan.-Mar.	53,972		---	53,972	1,174	1,314	266	993	1,460	4,033	5,207	48,765
Apr.-June	48,765		---	48,765	8,352	1,500	160	1,033	4,450	7,143	15,495	33,270
Season	45,634	29,183	154	74,971	9,717	5,217	5,321	3,159	18,287	31,984	41,701	33,270
1973/74												
July-Sept.	33,270	26,263	---	59,533	12,116	1,537	2,255	449	6,358	10,599	22,715	36,818
Oct.-Dec.	36,818		---	36,818	9,911	1,599	2,255	624	996	5,474	15,385	21,433
Jan.-Mar.	21,433		1	21,434	142	1,654	245	712	785	3,396	3,538	17,896
Apr.-June	17,896		2/	17,896	4,671	1,421	147	574	124	2,266	6,937	10,959
Season	33,270	26,263	1	59,534	26,840	6,211	4,902	2,359	8,263	21,735	48,575	10,959
1974/75												
July-Sept.	10,959	19,293	18	30,270	1,731	1,426	2,070	218	4,386	8,100	9,831	20,439
Oct.-Dec.	20,439		5	20,444	2,198	1,404	2,070	383	2,509	6,366	8,564	11,880
Jan.-Mar.	11,880		---	11,880	1	1,320	225	349	1,704	3,598	3,599	8,281
Apr.-June	8,281		256	8,537	26	1,250	135	403	868	2,656	2,682	5,855
Season	10,959	19,293	279	30,531	3,956	5,400	4,500	1,353	9,467	20,720	24,676	5,855

1/ Residual item; roughly approximates total feed use.

2/ Less than 1,000 bushels.

3/ Partly estimated.

Table 24 --Rye: acreage, yield, and production, United States, annual 1970-75

Year of harvest	Acreage seeded ^{1/}	Acreage harvested	Yield per harvested acre	Production
	1,000 acres	1,000 acres	Bushels	1,000 bushels
1970	4,196	1,427	25.8	36,840
1971	4,847	1,754	28.1	49,288
1972	3,540	1,084	26.9	29,183
1973	3,545	1,033	25.4	26,263
1974	3,200	897	21.5	19,293
1975 ^{2/}	3,186	800	23.5	18,830

^{1/} Seeded for all purposes in preceding fall. ^{2/} Preliminary.

Table 25 --Rye: CCC operations and privately held stocks, 1970-74

Crop year	Placed under loan			Delivered to CCC ^{1/}	Total carryover ^{2/}	CCC stocks and loans outstanding at crop year end (June 30)			Privately held ("Free") stocks ^{3/}
	Loans	Direct purchases	Total			Stocks owned by CCC	Under loan	Total	
	----- 1,000 bushels -----								
1970/71	10,880	1,288	12,168	11,246	27,876	24,549	601	25,150	2,726
1971/72	18,958	1,238	20,196	10,290	45,634	33,156	8,674	41,830	3,804
1972/73	6,695	195	6,890	1,359	33,270	17,482	1,909	19,391	13,879
1973/74	443	2	445	---	10,959	2,698	7	2,705	8,254
1974/75	196	---	196	---	5,855	15	9	24	5,831

^{1/} Includes direct purchases and collateral acquired.

^{2/} Rye carryover refers to the end of the crop year.

^{3/} Derived by subtracting CCC stocks and loans outstanding from total carryover.

Table 26 --Rye: Stocks, United States, by quarters, 1970-75

Year	January 1				April 1			
	On farms	Off farm : mills, ele- vators, and : warehouses ^{1/}	Commodity : Credit : Corporation : ^{2/}	Total all positions	On farms	Off farm : mills, ele- vators, and : warehouses ^{1/}	Commodity : Credit : Corporation : ^{2/}	Total all positions
	----- 1,000 bushels -----							
1970	10,610	18,316	413	29,339	7,321	16,568	413	24,302
1971	14,437	25,838	529	40,804	10,219	23,613	529	34,361
1972	21,505	32,662	453	54,620	17,174	31,736	422	49,332
1973	15,914	37,831	227	53,972	12,984	35,555	226	48,765
1974	7,793	13,440	200	21,433	4,440	13,321	135	17,896
1975 ^{3/}	6,371	5,509	---	11,880	4,201	4,080	---	8,281
	July 1				October 1			
1970	2,797	17,912	421	21,130	20,313	27,300	529	48,142
1971	2,328	25,026	522	27,876	28,335	35,947	488	64,770
1972	11,543	33,748	343	45,634	21,294	40,378	254	61,926
1973	6,786	26,259	225	33,270	14,666	21,952	200	36,818
1974	2,745	8,198	16	10,959	11,579	8,860	---	20,439
1975 ^{3/}	2,904	2,951	---	5,855				

^{1/} All off-farm storages not otherwise designated, including flour mills, terminal elevators and processing plants.

^{2/} Rye owned by CCC and stored in bins or other storage owned or controlled by CCC. Other rye owned by CCC as well as rye outstanding under loan is included in other positions.

^{3/} Preliminary.

Table 27.--Rye: Farm and cash prices, by selected States and markets, 1973-75

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MS-233, August 1975

Item	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Season average 1/
- - - - Dollars per bushel - - - -													
<u>Colorado</u>													
1973/74	1.36	1.70	1.86	1.94	1.95	2.05	2.18	2.25	2.10	1.87	1.90	1.81	1.81
1974/75	1.97	2.42	2.58	2.60	2.69	2.65	2.51	2.57	2.15	2.15	2.15	1.99	2.40
<u>Georgia</u>													
1973/74	2.20	2.75	2.75	2.75	2.75	2.75	2.75	2.80	2.80	2.50	2.40	2.60	2.29
1974/75	2.60	2.70	2.65	2.70	2.70	2.75	2.70	2.60	2.60	2.55	2.50	2.45	2.60
<u>Kansas</u>													
1973/74	1.19	1.55	1.60	1.60	1.67	1.82	1.89	1.90	1.79	1.63	1.58	1.65	1.46
1974/75	1.80	2.14	2.30	2.28	2.26	2.18	2.05	2.04	2.06	2.04	2.08	2.10	2.05
<u>Minnesota</u>													
1973/74	1.18	1.82	2.19	2.22	2.03	2.41	2.93	2.82	2.81	1.79	1.74	2.11	2.02
1974/75	2.53	2.58	2.66	2.69	2.79	2.71	2.53	2.52	2.11	2.32	2.17	2.03	2.50
<u>Nebraska</u>													
1973/74	1.25	1.60	1.70	1.78	1.77	1.83	1.95	2.00	2.07	1.80	1.70	1.76	1.54
1974/75	1.95	2.28	2.53	2.62	2.64	2.35	2.28	2.06	2.06	2.12	2.10	1.98	2.20
<u>North Dakota</u>													
1973/74	1.09	1.82	2.19	2.20	2.00	2.43	3.05	2.84	2.90	1.75	1.75	2.10	2.08
1974/75	2.50	2.61	2.64	2.70	2.78	2.66	2.46	2.42	2.06	2.28	2.09	2.00	2.40
<u>South Dakota</u>													
1973/74	1.06	1.70	2.20	2.15	2.01	2.44	3.06	2.86	2.88	1.75	1.67	2.04	1.98
1974/75	2.45	2.50	2.60	2.63	2.70	2.64	2.48	2.38	2.12	2.34	2.17	1.99	2.40
<u>U.S. average farm</u>													
1973/74	1.35	1.78	2.12	2.14	2.06	2.32	2.74	2.63	2.67	1.81	1.72	2.19	1.91
1974/75	2.37	2.54	2.66	2.70	2.78	2.66	2.50	2.41	2.15	2.32	2.15	2.19	2.46
<u>Minneapolis No. 2</u>													
1973/74	1.60	2.17	2.79	2.65	2.46	2.86	3.44	3.38	3.16	2.21	2.09	2.57	2.62
1974/75	2.97	2.89	3.07	3.25	3.19	3.05	2.93	2.80	2.56	2.72	2.70	2.49	2.88
<u>Winnipeg No. 3</u>													
<u>Canadian Western</u>													
1973/74	2.52	2.72	3.21	2.70	2.56	3.02	3.51	3.33	3.17	2.55	2.50	2.91	2.89
1974/75	3.04	2.83	2.90	3.34	3.11	2.91	2.72	2.40	2.10	2.16	2.13	2.14	2.65

1/ Includes allowance for loans outstanding and purchases by the Government valued at the average loan and purchase rate. Simple average for Minneapolis No. 2 and Winnipeg No. 3.

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AUGUST 1975

WHEAT MARKETING YEAR TO CHANGE--

Effective June 1, 1976 the wheat marketing year will be changed to June 1 - May 31, from the current July 1 - June 30. The basis for the change are technological developments in wheat production that have resulted in a larger portion of the crop being harvested before June 30. Additional details on the June 1 - May 31 crop year will be included in the November Wheat Situation.