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## Disaster payments and federal crop insurance

The extensive flooding that hit much of the heartland this summer has refocused attention on federal programs that provide financial assistance to farmers hit by a disaster. While the damage estimates won't be finalized for some time, it's clear that the flood resulted in sizable crop losses for many of the affected farmers. In August, Congress responded with an additional \$2.3 billion in funding for disaster payments to farmers. The USDA also responded by extending the enrollment deadline for the so-called 0/92 option, a price-support program feature that will be particularly attractive to farmers hit by a total loss on program crops like corn. In addition, the Federal Crop Insurance Corporation (FCIC) expects to make some \$700 million in indemnity payments to farmers in the nine-state region hit by flooding. These and other forms of assistance will partially cushion the financial repercussions of the flood losses on farmers and—in turn—on the network of lenders and agribusiness firms that support farmers.

Disaster payments will be available to all farmers who experience a qualifying loss due to the recent floods, not just those located in a disaster-designated county. The coverage under disaster assistance for farmers extends to all crops and includes both quality and quantity losses. The parameters that define disaster benefits vary, depending on such factors as the type of crop hit by a loss, whether or not that crop was also covered by federal crop insurance (if available) and—for program crops—whether the farm was enrolled in the price support program. As a minimum, farmers must incur a loss of 35 percent of expected production in order to qualify for a disaster payment. (The minimum rises to 40 percent when the loss is on crops not also covered by federal crop insurance). Farmers who experience a total loss on any crop would therefore be eligible for a disaster payment on 65 percent of the expected production for that crop (60 percent if not covered by crop insurance). "Expected production" for program crops (such as corn and wheat) is defined in terms of the established program crop yield for the applicant farm. For soybeans and most other crops, expected production is defined in terms of the average yield for the county in which the farm is located.

Disaster payment rates for program crops are set at 65 percent of the target price if the applicant farm is also a participant in the price support program and 65 percent of

the loan rate if a nonparticipant. For corn, that translates into disaster payment rates of \$1.79 and about \$1.12 a bushel for participating and nonparticipating farms, respectively. The payment rate for soybeans is \$3.69 a bushel which is equivalent to 65 percent of the five-year average market price, excluding the high and low year.

Unlike the provisions in recent years, disaster benefits for those hit by the flood of 1993 will *not* be reduced by the so-called allocation factor. As such, the disaster payment to a farmer hit by the flood will be double the payment made on a comparable loss to a hurricane victim of last year. However, the maximum disaster payment to any one farmer remains capped at \$100,000. And for price-support program crops, the rules still preclude the making of disaster and deficiency (target price) payments on the same unit of production. As such, final disaster payments to program participants will net out any overlapping deficiency payments. For corn farmers, this adjustment can be rather sizable considering the advance deficiency payment that was available this year.

The calculation of disaster payments can get fairly complex, in part because of the need to sort out overlapping deficiency payments on program crops. And judging the "adequacy" of disaster payments relative to the revenue a farmer might expect from a normal harvest is complicated by assumptions about such things as normal per-acre yields, expected market prices, and government payments. However, a rough approximation would suggest that a corn farmer who is enrolled in the price support program and who experiences a total flood loss would receive combined disaster and deficiency payments that would range between 38 and 50 percent of the proceeds that might be expected from a "normal" corn harvest. The lower end of the range would be more representative for farmers that did not carry federal crop insurance on corn. Alternatively, the upper end of the range would be more representative of the combined disaster/deficiency payments that a farmer with crop insurance might receive if he elected the 0/92 option. The 0/92 option is particularly attractive to corn farmers who suffer a total, or near-total, loss because it offers a *guaranteed* deficiency payment at the rate of 72 cents a bushel on 92 percent of the payment-acreage production. Regular program enrollment offered a preliminary, 36 cent advance deficiency payment on the full payment acreage production. However, a final settlement could adjust that rate up or down

depending on the average market price during the first five months of the 1993/94 corn marketing year.

The federal crop insurance program offers all peril insurance on most crops in most counties. Although heavily subsidized, usage of the program is rather modest in terms of both the number of farmers that carry crop insurance and the level of coverage they select. Nationwide, the \$11.3 billion in indemnity liabilities assumed by the FCIC in 1992 were equivalent to only 13 percent of all cash receipts from crop sales. Participation among farmers varies widely, but tends to be higher in the Midwest. FCIC officials note that about 57 percent of the insurable acreage of major crops in the nine states hit by flooding this year were covered by some level of crop insurance last year. The corresponding shares for the three affected District states were 11 percent for Wisconsin, 44 percent for Illinois, and 60 percent for Iowa.

The crop insurance program offers participants various quantity and price options for structuring their coverage. The four quantity options—35, 50, 60, or 75 percent—relate to the expected production of the insured crop and are defined in terms of the historical average of actual yields on the applicant farm—if verifiable—or the overall county-wide yields. The 50 and 65 percent quantity options are the most heavily subsidized and therefore the more popular choices of farmers. Indemnity payments are made on any portion of a loss that cuts into the selected quantity option. A farmer with 65 percent quantity coverage would receive an indemnity payment on 15 percent of expected production if hit by losses that pulled his actual yield to 50 percent of the historical average. The amount of the indemnity payment would hinge on the price option selected upon entering the program. A wide range of price options are typically offered. For 1993, the range for corn extended from 60 cents a bushel to \$2.30 a bushel while that for soybeans stretched from \$1.50 to \$5.70 a bushel.

The magnitude of the flood-related indemnity payments to be made by the Federal Crop Insurance Corporation this year are still being tabulated. However, the FCIC has projected that those payments might approximate \$700 million across the nine states hit by the 1993 flood. A large share—about \$300 million—of the total is expected to be paid to Iowa farmers. Far more modest shares of around \$10 million each are projected for Illinois and Wisconsin. The “adequacy” of any indemnity payment to offset the crop losses for an individual farmer hinges on the coverage options they selected. But as an example, an insured corn farmer with 50 percent quantity coverage at the full \$2.30 price option who suffers a total crop failure would receive an indemnity payment equivalent to around 35 to 40 percent of expected revenues from a normal harvest. That coupled with disaster and deficiency payments would ease much of the financial loss

resulting from a complete crop failure due to the flood. Unfortunately, not many farmers will have both disaster and crop insurance benefits.

Gary L. Benjamin

### **Food prices expected to post moderate gain**

Food prices will likely register another moderate gain for 1993 despite earlier concerns about the effect of flooding in the Midwest and drought in the Southeast. Through August, the Consumer Price Index (CPI) for all food averaged 2 percent above the same period a year ago. Sharp gains in retail prices for eggs and fresh vegetables were tempered by declines for non-alcoholic beverages and processed fruits. Most other food categories posted modest gains. In comparison, the non-food component of the CPI averaged 3 percent higher through August. Barring some unforeseen circumstance, this should mark the third consecutive year that the increase in food prices has lagged the gain for non-food items.

The CPI for food is composed of two components—food consumed at home and food consumed away from home. The CPI for food consumed away from home averaged about 2 percent higher through August of this year, similar to the gain recorded for all of last year. In comparison, the at-home index posted an average gain of less than 1 percent in 1992, the smallest annual increase since 1967. The rate of gain has increased to slightly over 2 percent this year, but is still quite modest by historical standards. The moderate increase recorded by the at-home index is attributed to ample food supplies as well as weakened consumer demand deriving from sluggish economic conditions. Furthermore, consumers are thought to have altered their purchasing patterns away from the more expensive food items that have undergone comparatively more processing.

Meat and poultry prices have a considerable impact on the CPI for food consumed at home since they account for a significant portion of the average consumer's food dollar. Retail beef prices averaged about 4 percent higher during the first eight months of 1993 after showing little change the prior year. The increase stems mostly from a lower level of production. Pork prices—on average—posted a modest gain of 2 percent as production showed little change from last year. The percentage increase in retail poultry prices this year is about the same as for beef. But unlike beef prices—which were supported by dampened supply—the strengthening of poultry prices has been driven by the ongoing upward trend in per-capita consumption.

Egg usage per capita rose last year for the first time since 1979 as production gains weakened prices and stimulated



### Average annual percent change in retail food prices

	1982-91*	1992	Jan.-Aug. 1993
<b>Food</b>	3.8	1.2	2.0
<b>Food away from home</b>	4.1	2.0	1.7
<b>Food at home</b>	3.7	0.7	2.2
Beef & veal	3.1	-0.1	3.6
Pork	3.2	-4.7	2.2
Poultry	3.6	-0.1	4.1
Fish & seafood	4.7	2.3	2.8
Eggs	2.9	-10.6	11.3
Dairy products	2.7	2.7	0.9
Fats & oils	3.6	-1.4	0.0
Fresh fruits	7.7	-5.0	0.0
Fresh vegetables	5.6	2.3	8.1
Processed fruits	3.5	4.5	-4.8
Processed vegetables	3.0	0.2	0.9
Sugar & sweeteners	3.2	2.9	0.2
Cereal & bakery products	4.7	3.9	3.3
Nonalcoholic beverages	1.7	0.2	-0.3
Other prepared foods	n.a.	2.2	2.5

\*Average annual compound rate.

Source: Bureau of Labor Statistics and U.S. Department of Agriculture.

demand. Conversely, per-capita production declined this year while prices recovered. Through August, retail egg prices were up an average of 11 percent over same period a year ago. In contrast, dairy product prices have averaged only 1 percent higher this year. Milk production is not expected to keep pace with population growth this year but price increases have been restrained by lackluster gains in commercial disappearance.

Fresh fruit and vegetable prices have demonstrated a good deal of volatility again this year. The seasonal nature of production and its vulnerability to adverse weather sometimes leads to temporary supply disruptions and large swings in retail prices. In particular, lettuce prices—an important component of the CPI for fresh vegetables—posted sharp gains last spring as flooding in Arizona led to significant production losses and field work in California was delayed by wet weather. Consequently, the CPI for fresh vegetables has averaged 8 percent higher through August of this year. In contrast, fresh fruit production has escaped major supply disruptions this year and retail prices have averaged about the same as a year ago.

Processed fruit prices were down nearly 5 percent through August as compared to the same period a year ago, primarily due to a larger Florida orange crop and improved juice yields. On the other hand, processed vegetable prices have shown little tendency to increase despite a production decline. Weak prices and ample stocks

prompted a cutback in the acreage devoted to processing vegetables earlier this year and production was further affected by weather-related problems in the Midwest that caused a decline in harvested acreage and yields. However, the stocks that prompted the acreage cutback have served to keep a lid on retail prices, which were up approximately 1 percent through August.

The decline in processed vegetable production underscores the concern raised in recent months regarding the effect of the summer weather on food prices. Though the wheat harvest is up slightly, corn and soybean production is expected to be well below a year ago as millions of acres were destroyed or will suffer reduced yields. Therefore, one might reasonably expect the shortfall in grain production to support price gains for meat as well as for processed products—such as fats and oils, cereal and bakery products, and sweeteners—that use corn or soybeans as raw material. However, most analysts agree the impact on food prices will be minimal. Despite the decline from last fall's banner harvest, current projections indicate the corn and soybean harvest will be near the 1989-91 average.

The retail price index for fats and oils has not demonstrated a consistent trend this year with gains and declines being about equal. The CPI for sugar and sweeteners declined during the summer while the average level through August was nearly unchanged from the same period a year ago. In contrast, retail prices for cereal and bakery products rose during the summer months and averaged about 3 percent higher for the January through August period. However, the effect on the CPI for food at home is limited by the small proportion of food expenditures accounted for by cereal and bakery products.

Mike A. Singer

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### Selected agricultural economic indicators

	Latest period	Value	Percent change from		
			Prior period	Year ago	Two years ago
<b>Prices received by farmers</b> ( <i>index, 1977=100</i> )	August	142	1.4	2	-2
<b>Crops</b> ( <i>index, 1977=100</i> )	August	122	3.4	4	-8
Corn (\$ per bu.)	August	2.20	-0.9	2	-6
Hay (\$ per ton)	August	77.40	0.3	12	9
Soybeans (\$ per bu.)	August	6.36	-3.2	18	12
Wheat (\$ per bu.)	August	3.01	5.6	0	14
<b>Livestock and products</b> ( <i>index, 1977=100</i> )	August	162	0.6	1	3
Barrows and gilts (\$ per cwt.)	August	48.00	2.8	7	-8
Steers and heifers (\$ per cwt.)	August	75.70	0.7	1	6
Milk (\$ per cwt.)	August	12.60	-1.6	-7	2
Eggs (¢ per doz.)	August	61.3	6.4	14	-3
<b>Consumer prices</b> ( <i>index, 1982-84=100</i> )	August	145	0.3	3	6
Food	August	141	0.4	2	4
<b>Production or stocks</b>					
Corn stocks ( <i>mil. bu.</i> )	June 1	3,709	N.A.	35	24
Soybean stocks ( <i>mil. bu.</i> )	June 1	683	N.A.	-2	-6
Wheat stocks ( <i>mil. bu.</i> )	June 1	529	N.A.	12	-39
Beef production ( <i>bil. lb.</i> )	August	2.06	4.1	4	-1
Pork production ( <i>bil. lb.</i> )	August	1.39	5.7	1	7
Milk production* ( <i>bil. lb.</i> )	August	10.7	-2.7	0	3
<b>Receipts from farm marketings</b> ( <i>mil. dol.</i> )	May	13,530	-5.2	9	4
Crops**	May	4,757	2.6	5	-6
Livestock	May	7,827	2.4	10	14
Government payments	May	945	-52.8	30	-11
<b>Agricultural exports</b> ( <i>mil. dol.</i> )	July	3,080	-2.1	-6	5
Corn ( <i>mil. bu.</i> )	July	91	18.0	-38	-44
Soybeans ( <i>mil. bu.</i> )	July	43	8.5	2	6
Wheat ( <i>mil. bu.</i> )	July	108	19.3	6	27
<b>Farm machinery sales</b> ( <i>units</i> )					
Tractors, over 40 HP	August	3,394	-16.0	3	1
40 to 100 HP	August	2,521	-16.3	1	8
100 HP or more	August	873	-15.2	8	-14
Combines	August	619	5.6	5	9

N.A. Not applicable

\*21 selected states.

\*\*Includes net CCC loans.

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2
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