

Hog Producers Get A Surprising Profit Thrust

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It now looks like hog producers will enjoy profits through this coming winter, and that the level of returns this summer will be higher than had been anticipated earlier. These good fortunes are the result of smaller pork supplies than had been expected, and stronger demand as a result of high retail beef prices and especially Foot and Mouth Disease (FMD) in Europe which has helped stimulate U.S. exports.

The breeding herd remained up only 1%, and farrowing intentions for spring and summer also were up only 1%. In addition, the winter pig crop at 1.5% larger was much smaller than the 4% increase that market participants had been expecting.

Supplies are expected to rise by about 2.7% for the remaining portion of 2001, rather than 4%. The increase in domestic and export demand will absorb this level of supply increase, with prices being similar to last year.

Hog prices for the live equivalent of 51% to 52% lean hogs is expected to move into the lower \$50s in late May and early June. Moderation in prices is expected for the mid summer with prices back into the lower \$40s by the end of the summer. Fall prices are expected to average around \$40, and a few dollars lower in the winter.

Given these prices and current feed prices indicated by futures markets, profits will reach \$12 to \$14 per hundredweight in the spring quarter. For all of 2001, profits are expected to average \$6.60 compared with \$7.70 last year. The profitable period is expected to continue through next winter, however increased farrowings by this fall and potential resolution of the European FMD issue may contribute to end the profit run at that time.

Producers are advised to not expand production, based upon the assumption that the current increase in export demand from European FMD is permanent, but rather wait until the summer when the longer-term implications should be more apparent.

The Numbers

Data from the report are shown in Table 1. The breeding herd was up by nearly 1%. This was the same percentage increase as the December inventory and seems to indicate that the breeding herd size has been very stable over the last quarter. The number of market hogs that will be coming to market in the April to August period should be in the 2% to 2.5% increase based upon the increases in the pigs which are newly farrowed up to 180 pounds.

The pig crop from the past winter's farrowings was smaller than anticipated. Farrowings were up 1, while intentions back in December were for winter farrowings to be up 4%. This seemingly reflects a change in producer attitude regarding expansion. In addition to smaller than expected farrowings, the pigs per litter at 8.76 was only slightly larger than the same quarter in the

previous year. Weaning rates have been jumping sharply as large operations with high productivity have been increasing their share of the industry. The lower than expected weaning rate is likely related to the relatively severe and cold winter. Of course another possibility is that the rate of increase in pigs per litter is slowing.

Farrowing intentions for this spring were up 1%, which was reduced somewhat from the level in December. First intentions for this coming summer are for farrowings to be up 1% also.

The Eastern Corn Belt was one region where producers seem to be expanding. The breeding herd was up a startling 23% in Wisconsin, up 3% in Ohio and Indiana, as well as 2% in Illinois. In total, 25,000 animals were added to the breeding herd in the Eastern Corn Belt. Even with this modest expansion in the Eastern Corn Belt, the region still has 23% fewer breeding herd animals compared with March of 1998. In contrast the country has 11% fewer.

The other region that demonstrated continued expansion was the Southern Plains where the breeding herd was up by 13% in Texas and by 10% in both Oklahoma and Kansas.

In other large hog states, Iowa's herd was down 3%, Nebraska was down 5%, Missouri and North Carolina were both unchanged, and Minnesota was up 5%.

Monthly Reports: The First Evaluation

The new *Monthly Hogs and Pigs* reports began last December. As a result, the current *Quarterly Hogs and Pigs* report is the first to be released after two previous monthly reports. Those two reports indicated that the December and January farrowings were up 2% and 4% respectively. Thus provided little clue that farrowings would ultimately be up only 1% in the March quarterly report. Farrowing numbers for both December and January were revised lower in the quarterly report. The larger differences however were in the pigs per litter category. The monthly reports indicated weaning rates of 8.89 and 8.94 pigs for December and January. These were revised lower to only 8.74 and 8.77 in the quarterly March report. Both of the monthly reports were indicating that the winter pig crop would be up 2% to 4%. The adjustments made in the March quarterly report deflated those expectations.

The first set of monthly reports provided indications that were somewhat at odds with the quarterly report. This is bound to happen. The hope for the monthly reports is that they will give a quicker snapshot of the changing trends in the industry. Unfortunately, the first few monthly reports have lost some credibility. Over time however, USDA can be expected to continue to improve their techniques and gain better accuracy in the monthly survey. For now however, most analyst will look at the monthly reports, but wait for the quarterly reports for confirmation.

Moderate Growth in Supplies

Pork production is expected to expand by 1.9% in 2001 to 19.3 billion pounds. This is a reduction from the 19.5 billion pounds estimated after the December *Hogs and Pigs* report.

Supplies are expected to rise 2% to 3% in the last three quarters of 2001, after being down slightly in the first quarter. Supplies in early 2002 are also expected to be up about the same amount.

Prices are expected to remain profitable for most of the year. The strength in prices is a result of smaller than anticipated pork supplies and in expectation for a continued strong pork demand. Prices this spring are expected to average in the higher \$40. The highest prices of the 2nd quarter are expected to be in late May and early June when they are expected to reach the low \$50s. Prices will likely edge lower in the late summer. Third quarter prices are expected to average in the low-to-mid \$40s. Prices may drop in the final quarter of 2001 into the higher \$30 at times in October and November, but are expected to average around \$40. For the winter, prices are expected to drop back close to breakeven in the mid-to-higher \$30s (**Table A**)

Table A: Historic and Anticipated Pork Supplies and Prices

Year	Quarter	Production Million#s	Percent Change vs. Year-ago	Year	Quarter	Liveweight Price \$/cwt.	Percent Change vs. Year-ago
1996	Year	17,085	-4.1%	1996	Year	\$53.31	27.0%
1997	Year	17,244	0.9%	1997	Year	\$51.40	-3.6%
1998	I	4,688	11.8%	1998	I	\$34.74	-32.0%
	II	4,429	8.3%		II	\$39.42	-30.0%
	III	4,625	10.3%		III	\$33.95	-37.6%
	IV	5,239	9.9%		IV	\$19.30	-55.8%
		18,981	10.1%			\$31.85	-38.0%
1999	I	4,865	3.8%	1999	I	\$28.83	-17.0%
	II	4,630	4.5%		II	\$35.18	-10.8%
	III	4,672	1.0%		III	\$35.70	5.2%
	IV	5,110	-2.5%		IV	\$36.29	88.0%
		19,277	1.6%			\$34.00	6.7%
2000	I	4,824	-0.8%	2000	I	\$41.14	42.7%
	II	4,470	-3.5%		II	\$50.43	43.3%
	III	4,601	-1.5%		III	\$46.43	30.1%
	IV	5,010	-2.0%		IV	\$40.78	12.4%
		18,905	-1.9%			\$44.70	31.5%
2001	I	4,809	-0.3%	2001	I	\$42.86	4.2%
	II	4,589	2.7%		II	\$48.52	-3.8%
	III	4,714	2.5%		III	\$42.73	-8.0%
	IV	5,151	2.8%		IV	\$40.14	-1.6%
		19,263	1.9%			\$43.56	-2.5%
2002	I	4,922	2.3%	2002	I	\$37.80	-11.8%

Foot and Mouth Demand Boost

Hog prices surged higher in March as a result of Foot and Mouth (FMD) disease infections in Europe. FMD was confirmed in England on Feb 20th, Ireland on February 28th, France on March 13th, and in the Netherlands on March 21. U.S. prices began to respond in early March. Other countries such as Saudi Arabia, the United Arab Emirates also had positive test. As of this writing, testing in Denmark is being conducted. In addition to Europe, Argentina also has a

Table B: Production and Pork Exports for Selected Countries Based Upon Data for the Year 2000

	Production	Exports	Within Europe	Outside Europe
	<i>.....Billion Pounds.....</i>			
U.S.	18.9	1.3		
Canada	4.0	1.9		
Europe	50.5	11.5	8.5	3.0
Denmark	3.6	2.8	1.6	1.2
France	5.1	1.2	0.9	0.3
Poland	3.6	0.3	0.0	0.3
Netherlands	3.6	2.4	2.2	0.2
Belgium	2.2	1.3	1.2	0.1
Spain	6.5	1.0	0.9	0.1
Hungary	1.0	0.3	0.2	0.1

number of confirmed cases.

In March of 2001, the world's outbreaks of FMD had a positive impact on hog prices in the U.S. **Table B** helps to illustrate how this has benefitted U.S. producers. You will see that the Europeans are huge producers of pork at 50.5 billion pounds in 2000. Exports for all of Europe are large also at 11.5 billion pounds, but much of this is intra European shipments (8.5 billion pounds). However, this still leaves 3 billion pounds that is exported

out of Europe to the rest of the world. The major buyers are Japan, Hong Kong, South Korea, Russia, and of course the U.S.

The two countries (in this list) with FMD are France and the Netherlands. Combined they export about 500 million pounds out of Europe. Compare this .5 billion pounds with all of the exports of the U.S. at 1.9 billion pounds. In other words, if the U.S. were to supply all of the exports to non-European countries lost due to FMD in France and the Netherlands it would increase our exports by 38%, or about 2.6% of production.

The importance of Denmark cannot be overstated. They are by far the largest exporter of pork outside Europe at 1.2 billion pounds. Denmark's non-European exports by themselves approach the volume equivalent of ALL U.S. exports. There are really only two countries in the world that could handle such large additional potential pork demand, and those are the U.S. and Canada. If Denmark were to break with FMD, their lost exports would represent 5% of all production in the U.S. and Canada, and live hog prices could move higher by an additional \$4 to \$6 per hundredweight.

What about the United Kingdom where so much of the media attention has been focused? In terms of the impact on international pork trade, FMD there is a small event. This is because the UK is a large net importer of pork to the tune of about 1.2 billion pounds. The liquidation of animals with positive test for FMD generates much media attention and is catastrophic for those producers, but is a relatively small percentage of the total number of animals in the country.

The two largest pork buyers in the world, Japan and the U.S., have both restricted pork imports from European countries. This ban will stay in effect until at least two conditions are met. The first is that the spread of FMD in Europe terminates and negative FMD European countries can convince Japan and the U.S. they are indeed FMD free. There is no stated time line for this, but talk of easing restriction this summer, if the spread is soon contained, have been floated by U.S.

public officials.

To date, I would estimate that the FMD issue in Europe has added \$2 to \$4 per live hundredweight to pork prices. If the disease should spread to Denmark an additional \$4 to \$6 might be added.

How long will this price enhancement last? The answer, like the spread of the disease itself, is uncertain. But it would appear to have favorable impacts on demand through this summer.

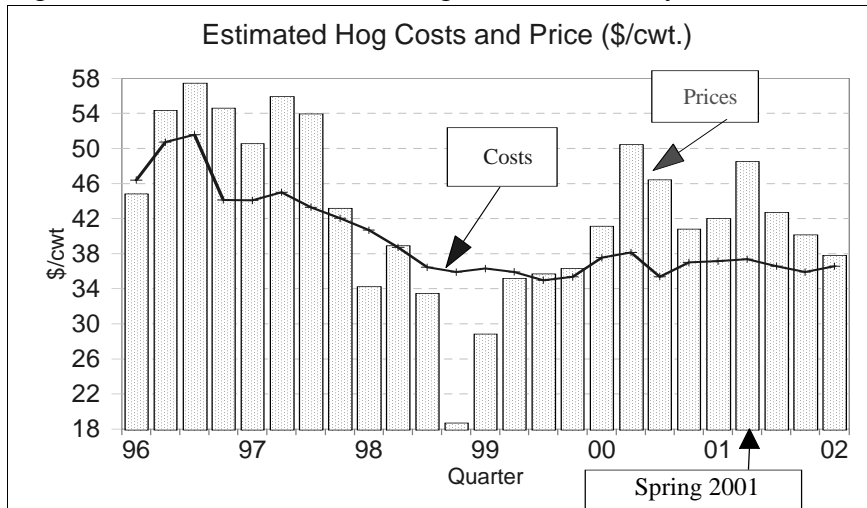
While FMD in Europe bodes well for U.S. pork producers in the short-run, the question of whether we can keep it out of the U.S. quickly sobers even the most optimistic pork producer. The potential inability to export pork with a FMD outbreak in the U.S., in combination with a drop in domestic consumption due to health concerns associated with pork consumption could drop U.S. price as much as 25% with the negative impact on hog producers mounting into several billion dollars. On the other hand if an outbreak here could be isolated and contained quickly, the longer-term impact might be modest, but we would expect at least a jolt in prices to the downside in the initial few days of the outbreak.

Implications of the Current Outlook

Profits for pork producers could reach \$12 to \$14 per live hundred weight for the second quarter of the year as shown in **Figure 1**. They are expected to move lower through next winter when they may be small. For the year of 2001, my current estimate is for a profit of \$6.60 per

hundredweight compared to \$7.70 in 2000. The large profits in the second quarter are expected to encourage producers to consider expansion opportunities. Expansion by this fall would result in further increases in supply by next spring, a point by which this profit cycle could be over. The positive news at this point is that the period when prices get pushed back to breakeven is about 6 months later than previous estimates.

Figure 1: Estimated Costs and Hog Prices; Quarterly



Should producers expand? The answer is related to whether one believes that world pork trade will be altered due to FMD for a few months, a few years, or permanently! As long as FMD continues to spread in Europe and upon the world stage, export demand for the U.S. and Canada

can be expected to grow. On the other hand, if FMD is contained in Europe to current locations, portions of Europe such as Denmark may be allowed to start exporting pork again this summer. Broader lifting of bans on European pork will likely take longer, perhaps up to one year after officials can certify their region to be FMD free. On the other hand the WTO allows a country to regionalize the contaminated area of the country while exporting from regions that can be certified to be FMD free. However, importing countries also have to agree to accept pork from the approved regions.

No one knows the path of FMD containment, but it is clear that more will be known about the extent of the problem in the next few months. If U.S. and Canadian producers rush into expansion to fill the export voids of Europe, a repeat of the 1997 Taiwanese Situation could occur. In that situation, producers in the U.S., Canada, and Europe all jumped at the opportunity to gain the lost Taiwanese market share in Japan. Such a large worldwide pork expansion was a contributing factor in the late 1998/99 price depression. A more controlled approach is suggested this time. This includes a wait and see attitude by U.S. pork producers. The picture should be much clearer by the middle-to-end of the summer.

Table 1. Hogs and Pigs in the United States, March 1, 2001

	2000	2001	2001 as % of 2000
	thousand head		percent
Inventory			
All hogs and pigs	57,782	58,754	101.7
Kept for breeding	6,190	6,244	100.9
Kept for market	51,593	52,510	101.8
Market hogs by weight			
Under 60 pounds	19,217	19,594	102.0
60-119	12,409	12,704	102.4
120-179	10,552	10,808	102.4
180 and over	9,414	9,405	99.9
Sows farrowing			
Sept 00 - Nov 00	2,844	2,848	100.1
Dec 00 - Feb 01	2,798	2,836	101.4
Mar 01 - May 01 ¹	2,885	2,907	100.8
June 01 - Aug 01 ¹	2,889	2,917	101.0
Pigs saved per litter			
Sept 00 - Nov 00	8.78	8.85	100.8
Dec 00 - Feb 01	8.73	8.76	100.3
Pig crop			
Sept 00 - Nov 00	24,973	25,208	100.9
Dec 00 -Feb 01	24,522	24,896	101.5

¹Intentions

Table 2. U.S. Market Hogs Weighing 60 to 179 Pounds on March 1, and Commercial Slaughter in Calendar Quarter from April through June

Years ^c	Number of Hogs	April-June	Ratio
	60 to 179 Pounds	Commercial Slaughter	
thousand head			
1990	19,811	20,257	102.3
1991	20,351	20,921	102.8
1992	21,645	22,202	102.6
1993	22,479	22,661	100.8
1994	22,620	22,971	101.6
1995	23,092	23,646	102.4
1996	22,075	22,201	100.6
1997	21,485	21,834	101.6
1998	23,565	23,631	100.3
1999	23,894	24,292	101.7
2000	22,961	23,107	100.6
2001 ^a	23,512	23,716	100.9 ^b

^a Projected

^b Mean of previous three years

Table 3. U.S. Sow Farrowings and Pig Crop Compared to U.S. Commercial Slaughter (thousand head), with 7-month Lag 1991 to 2002

Year	Sows Farrow	Pig Crop	Ratio	Year	Commercial	Ratio ^b
					Slaughter	
<u>September-November</u>				<u>April-June</u>		
1991	2,969	23,427	7.89	1992	22,202	94.8
1992	2,992	24,086	8.05	1993	22,661	94.1
1993	2,982	24,003	8.05	1994	22,965	95.7
1994	2,997	24,517	8.18	1995	23,646	96.5
1995	2,815	23,479	8.34	1996	22,201	94.6
1996	2,731	23,327	8.54	1997	21,834	93.6
1997	2,939	25,494	8.67	1998	23,631	92.7
1998	2,993	25,902	8.66	1999	24,292	93.8
1999	2,844	24,973	8.78	2000	23,107	92.5
2000	2,848	25,208	8.85	2001	23,444	93.0
<u>December-February</u>				<u>July-September</u>		
1991	2,892	23,258	8.04	1992	23,746	102.1
1992	2,808	22,871	8.15	1993	22,777	99.6
1993	2,885	23,368	8.10	1994	23,673	101.3
1994	2,886	23,851	8.27	1995	23,264	97.5
1995	2,735	23,054	8.43	1996	22,711	98.5
1996	2,684	23,164	8.63	1997	22,666	97.9
1997	2,929	25,480	8.70	1998	25,038	98.3
1998	2,891	25,247	8.73	1999	24,960	98.9
1999	2,798	24,522	8.76	2000	24,097	98.3
2000	2,836	24,896	8.78	2001	24,514	98.5
<u>March-May</u>				<u>October-December</u>		
1991	3,287	26,158	7.96	1991	24,367	93.2
1992	3,368	27,208	8.08	1992	25,138	92.4
1993	3,220	26,135	8.12	1993	24,574	94.0
1994	3,390	27,984	8.26	1994	26,322	94.1
1995	3,170	26,373	8.32	1995	25,198	95.5
1996	2,930	24,833	8.48	1996	23,833	96.0
1997	2,911	25,229	8.67	1997	25,152	99.7
1998	3,086	26,989	8.75	1998	27,584	102.2
1999	2,986	26,272	8.80	1999	26,732	101.8
2000	2,885	25,565	8.86	2000	25,714	100.6
2001 ^a	2,907	25,901	8.91	2001	26,293	101.5
<u>June-August</u>				<u>January-March</u>		
1991	3,105	24,499	7.89	1992	23,802	97.4
1992	3,020	24,590	8.14	1993	23,057	93.8
1993	2,972	24,041	8.09	1994	22,746	94.6
1994	3,107	25,547	8.22	1995	24,229	94.8
1995	2,976	24,813	8.34	1996	23,650	95.3
1996	2,718	23,244	8.55	1997	22,342	96.1
1997	2,946	25,696	8.72	1998	24,776	96.4
1998	3,054	26,634	8.72	1999	25,571	96.0
1999	2,920	25,862	8.86	2000	25,019	96.7
2000	2,889	25,686	8.84	2001	24,592	96.4
2001 ^a	2,917	25,961	8.90	2002	25,021	96.4

^a Projected

^b Ratio for most recent time periods are the mean of previous three years

Table 4. U.S. Commercial Slaughter, Slaughter Carcass Weights, and Quarterly Pork Production 1990-2001

Year	Quarter	Commercial Slaughter (thou. hd.)	Carcass Weight Per Hog	Pork Production (mill. #'s)	Percent Change Year-Ago
1990	I	21,879	178.3	3,902	+4
	II	20,257	179.9	3,645	-7.2
	III	20,350	178.8	3,639	-4.0
	IV	22,628	181.4	4,105	-1.2
1991	I	21,508	181.4	3,902	0.0
	II	20,921	181.3	3,792	4.0
	III	21,371	178.8	3,822	5.0
	IV	24,365	182.0	4,434	8.0
1992	I	23,802	181.5	4,321	10.7
	II	22,202	181.7	4,033	6.4
	III	23,746	179.6	4,264	11.6
	IV	25,138	181.7	4,567	3.0
1993	I	23,057	182.5	4,207	-2.6
	II	22,661	183.2	4,151	2.9
	III	22,777	181.7	4,138	-3.0
	IV	24,573	184.5	4,534	-0.7
1994	I	22,746	183.9	4,182	-0.6
	II	22,965	184.6	4,240	2.1
	III	23,673	182.7	4,326	4.5
	IV	26,322	186.6	4,913	8.4
1995	I	24,229	185.2	4,488	7.3
	II	23,646	185.8	4,394	3.6
	III	23,264	182.3	4,240	-2.0
	IV	25,198	186.1	4,690	-4.5
1996	I	23,650	185.6	4,389	-2.2
	II	22,201	184.9	4,104	-6.6
	III	22,711	182.4	4,143	-2.3
	IV	23,833	186.7	4,449	-5.1
1997	I	22,342	187.7	4,194	-4.4
	II	21,834	187.4	4,091	-0.3
	III	22,666	185.0	4,196	1.3
	IV	25,152	189.5	4,766	7.1
1998	I	24,776	189.2	4,688	11.8
	II	23,631	187.5	4,429	8.3
	III	25,038	184.7	4,625	10.2
	IV	27,523	188.9	5,239	9.9
1999	I	25,571	190.3	4,865	3.8
	II	24,292	190.6	4,630	4.5
	III	24,960	187.2	4,672	1.0
	IV	26,732	191.2	5,110	-2.5
2000	I	25,019	192.8	4,824	-0.8
	II	23,107	193.4	4,470	-3.5
	III	24,097	190.9	4,601	-1.5
	IV	25,714	194.8	5,010	-2.0
2001	I ^p	24,592	195.6	4,809	-0.3
	II ^{ac}	23,580	194.6	4,589	2.7
	III ^a	24,514	192.3	4,714	2.5
	IV ^a	26,293	195.9	5,151	2.8
2002	I ^a	25,021	196.7	4,922	2.3

a Projected

c Average of the two estimation methods (Table 2 and 3)

p Preliminary

Table 5. Actual and Forecast Hog Prices, Lean Carcass Prices, and Retail Pork Prices^a

Year	Quarter	Barrow and Gilts 6-Mkt Price (\$/cwt)	Lean Value (Live Price/74 yield) (\$/carcass cwt)	Retail Pork ¢/carcass cwt
1990	I	\$49.45	\$66.82	196.2
	II	\$59.01	\$79.74	208.4
	III	\$57.67	\$77.93	222.6
	IV	\$51.67	\$69.82	223.1
1991	I	\$51.50	\$69.59	215.2
	II	\$53.34	\$72.08	213.2
	III	\$50.85	\$68.72	214.6
	IV	\$39.84	\$53.84	204.6
1992	I	\$38.68	\$52.27	198.9
	II	\$44.83	\$60.58	195.9
	III	\$43.86	\$59.27	200.6
	IV	\$41.84	\$56.54	197.0
1993	I	\$43.96	\$59.41	194.6
	II	\$46.83	\$63.28	194.3
	III	\$47.49	\$64.18	200.2
	IV	\$43.23	\$58.42	201.3
1994	I	\$45.19	\$61.07	200.8
	II	\$42.44	\$57.35	198.8
	III	\$40.07	\$54.15	199.0
	IV	\$30.56	\$41.30	193.6
1995	I	\$38.19	\$51.61	191.6
	II	\$38.57	\$52.12	190.2
	III	\$48.32	\$65.30	195.6
	IV	\$42.86	\$57.92	201.8
1996	I	\$45.33	\$61.26	206.3
	II	\$54.84	\$74.11	214.9
	III	\$57.96	\$78.32	230.4
	IV	\$55.10	\$74.46	231.9
1997	I	\$51.06	\$69.00	231.0
	II	\$56.41	\$76.23	229.7
	III	\$54.45	\$73.58	234.5
	IV	\$43.69	\$59.04	231.0
1998	I	\$34.74	\$46.95	233.0
	II	\$39.42	\$53.27	226.9
	III	\$33.95	\$45.88	231.0
	IV	\$19.30	\$26.08	226.9
1999	I	\$28.83	\$38.96	235.8
	II	\$35.18	\$47.54	238.4
	III	\$35.70	\$48.24	246.4
	IV	\$36.29	\$49.04	245.2
2000	I	\$41.14	\$55.59	249.8
	II	\$50.43	\$68.15	257.3
	III	\$46.43	\$62.74	264.3
	IV	\$40.78	\$55.11	261.3
2001	I ^p	\$42.86	\$57.92	262.5
	II ^a	\$48.52	\$65.57	
	III ^a	\$42.73	\$57.74	
	IV ^a	\$40.14	\$54.24	
2002	I ^a	\$37.80	\$51.08	

^a Predicted prices for 2001 (I) forward are made with two equations with the results averaged.

^p Preliminary