

FARMLAND INDEX

NFI CONTINUES TO DELIVER STABLE RETURNS AMID STRONG MARKET VOLATILITY

FARMLAND TOTAL RETURNS							
	Total NPI	Total Farmland Index	Pacific West	Pacific Northwest	Corn Belt	Delta	Southeast
1st Qtr 2019	1.80	0.70	(0.16)	0.35	0.56	1.02	3.71
4th Qtr 2018	1.37	2.85	5.23	(0.27)	0.53	2.06	1.00
One Year	6.83	6.08	6.99	7.79	2.53	5.91	10.35
Three Year	7.07	6.43	8.44	9.71	1.33	4.38	7.86
Five Year	9.13	8.21	12.88	7.32	0.38	4.63	7.73
Seven Year	9.61	11.17	16.37	10.29	4.64	7.73	9.28
Ten Year	8.51	11.10	14.92	7.92	8.07	9.06	7.50
Inception	9.16	11.21	13.53	7.15	10.13	9.78	8.82

FARMLAND INCOME AND APPRECIATION RETURNS					
	Income	Appreciation	Total Return	Property Count	Market Value
1st Qtr 2019	0.54	0.16	0.70	901	10,354,420,236
4th Qtr 2018	2.19	0.66	2.85	900	10,169,500,380
One Year	4.50	1.54	6.08		
Three Year	4.77	1.60	6.43		
Five Year	5.49	2.62	8.21		
Seven Year	6.29	4.70	11.17		
Ten Year	6.42	4.50	11.10		
Inception	6.76	4.29	11.21		

FARMLAND PROPERTY DISTRIBUTION BY PROPERTY TYPE AND REGION		
Property Type	Number of Properties	Market Value \$ Millions
Annual Cropland	668	6,551
Permanent Cropland	233	3,804
Total	901	10,354
Pacific West	224	4,159
Pacific Northwest	55	647
Corn Belt	245	1,044
Delta States	137	2,169
Southeast	64	632
Mountain	75	902
Southern Plains	22	248
Lake States	44	274
Other	35	279
Total	901	10,354

CROP TYPE DISTRIBUTION					
Crop Type	Number of Properties	Market Value \$ Millions	1 year returns ending 3/31/2019		
			Income Return	Appreciation Return	Total Return
Annual-Commodity	469	3578	3.1%	1.28%	4.41%
Annual-Fresh Produce	44	832	3.55%	-10.29%	-7.02%
Annual-All Other	155	2140	4.05%	4.68%	8.87%
Annual-Total	668	6551	3.49%	2.35%	5.9%
Permanent-Apples	20	172	-4.44%	-2.19%	-6.59%
Permanent-Almonds	62	954	6.06%	-0.8%	5.23%
Permanent-Citrus	14	226	5.67%	0.38%	6.08%
Permanent-Pistachios	18	532	14.67%	-2.06%	12.56%
Permanent-Wine Grapes	75	1565	5.51%	2.19%	7.69%
Permanent-All Others	45	355	2.36%	-0.18%	2.17%
Permanent-Total	233	3804	6.16%	0.3%	6.44%
TOTAL	901	10354	4.5%	1.54%	6.08%

* Includes Corn, Soybean, Cotton, Wheat, Rice

** Includes ground primarily used to produce fresh vegetables or fresh fruit

***Includes All varieties of Oranges (Fresh and Juice), Lemons, and Avocados

The NCREIF Farmland Index (“NFI”) ended the first quarter 2019 with 901 properties and a new record market value of \$10.35 Billion. Over the past decade, the index has experienced an impressive growth in total market value increasing fivefold from \$1,798 billion at the end of 2008 to \$10.35 billion at the end of 1Q 2019. The increase has been driven by the net addition of new properties (+500) coupled with a

healthy annualized appreciation level of 4.50% over the past decade.

The first quarter of the year is normally a slow quarter for the harvest of many agricultural commodities. For this past quarter, the NFI had total quarter returns of 0.70% compared to 1.32% the first quarter a year ago. While the income for the first quarter was 0.54% and slightly higher than the 0.51% last year’s same quarter, appreciation returns were lower at 0.16% versus 0.81% the same time last year.

The permanent crops sub-index, which accounted for 37% of the total NFI value as of the end of March 2019, continued delivering stable total annualized returns of 6.44% (6.16% income and 0.30% appreciation returns). While the properties in the Pacific West have generated high single digit returns in the past years, prices for some of the commodities grown on this region, such as tree nut crops (i.e. almonds, walnuts), are returning to long-term averages which may reduce future quarterly income returns at the property level.

The annual cropland category posted total annual returns of 5.90%, driven by income and appreciation returns of 3.49% and 2.35%, respectively. On a regional basis, the Pacific Northwest has continued generating strong total returns over the past quarters driven by higher valuations. In fact, this region posted a 17.24% total return over the past year of which 13.85% was related to appreciation returns. As of the end of March 2019, annual cropland in the Southeast generated the second strongest total annual returns at 10.53% (4.01% income and 6.33% appreciation returns). On the other hand, lower commodity prices for annual row crops (i.e. corn,

soybeans), as compared to prior years, continue to put downward pressure on farmers’ operating margins and land values in the Corn Belt Region, especially for land with below average productivity levels. This region has seen declines in appreciation rates for the past five years and this trend may continue in future quarters. On-going trade disputes with key trading partners, higher beginning inventories, and projected ample global supplies are expected to keep grain prices stagnant. Additional reductions in land values for this region could be expected for the foreseeable future.

The U.S. agricultural economy may face short-term challenges in some commodity sectors, but the long-term international and domestic fundamentals remain strong.

Juan David Castro-Anzola
Director – Eastern Region
PGIM Agricultural Investments