Economic Characteristics of the NY/NE Agriculture & Food Sector

Jennifer Ifft
Assistant Professor and Mueller Family Sesquicentennial Faculty Fellow in Agribusiness and Farm Management

January 20, 2016
NY Farm Sector Indicators
• Key farm income components
• Farm wealth and land values
• Risk management

A Closer Look at NY Agriculture
• Farmland loss
• Crop insurance coverage trends

Looking Forward
NY farm income has been increasing but volatile.
NY farm income at high levels in recent years

Note: Government payments includes commodity programs, conservation payments, disaster payments, MILC, etc. and excludes Federal crop insurance premium subsidies.
Expenses, dairy receipts and feed crop receipts at peak levels

Production expenses and receipts
(Unit: $1,000,000)

Cash expenses: 1929-2009
Feed crops: 1929-2009
Dairy products, milk: 1929-2009
Fruits and vegetables: 1929-2009

Note: Inflation adjusted based on year 2009
Source: USDA Economic Research Service

Note: Cash expenses only available from 1949
Recent revenue trends vary by specialization

![Graph showing production expenses and receipts](image)

- **Production expenses and receipts (Unit: $1,000,000)**

  - Cash expenses
  - Feed crops
  - Dairy products, milk
  - Fruits and vegetables

Note: Inflation adjusted based on year 2009
Source: USDA Economic Research Service
Long-term trend of NE farm wages increasing faster than inflation

Note: Inflation adjusted using CPI based upon 2015.
CPI of year 2015 is the average CPI from Jan to Nov.
Data as hired labor (crop & animal workers) wage rate, measured in $ / hour
Northeast I region: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont
Source: USDA National Agricultural Statistics Service (downloaded from ag-analytics.org)
Inflation-adjusted wages increased sharply in 2015.

Northeast farm worker wages

Note: Inflation adjusted using CPI based upon 2015. CPI of year 2015 is the average CPI from Jan to Nov.
Data as hired labor (crop & animal workers) wage rate, measured in $ / hour
Northeast I region: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont
Source: USDA National Agricultural Statistics Service (downloaded from ag-analytics.org)
Total farm real estate values (wealth) continue to increase

Note: Farm real estate typically makes up more than 80 percent of total farm asset values
Crop and pasture values hold steady

![Diagram showing the value of farmland over time, with lines for cropland and pasture land, inflation adjusted using GDP based upon 2009, using 2015 data through Q3. Source: USDA National Agricultural Statistics Service (downloaded from ag-analytics.org).]
Crop insurance enrollment steady in recent years

![Diagram showing acres enrolled in federal crop insurance from 2006 to 2014. The line for field crops shows a steady increase. The line for fruits and vegetables shows a slight decrease. The line for all others shows a slight increase. The source is USDA Risk Management Agency (downloaded from ag-analytics.org).]
Loss experiences generally vary by commodity specialization

Note: Loss ratio = 1 implies total premiums paid (including premium subsidy) are equivalent to indemnities; typically farm operations pay less than 40 percent of total premiums, with the remainder as premium subsidy; 2015 premium subsidy was equivalent to approximately 66 percent of total premium in New York.
Excess moisture and cold are lead causes of NY crop losses

Note: Sum is equivalent to total NY Federal crop insurance indemnities
Loss of NY farmland

Ag land acres
(Unit: 100,000)

Note: Ag land includes cropland, pasture land, woodland and others. Source: USDA Census of Agriculture (downloaded from ag-analytics.org)
Cropland has experienced small declines

Source: USDA Census of Agriculture (downloaded from ag-analytics.org)
Pasture land has been steadily declining across New York.
Hay production has accordingly decreased.
Dairy cow inventory declining in most regions

**Dairy cow inventory**

(Unit: 10,000)

- CAPITAL REGION
- CENTRAL NEW YORK
- FINGER LAKES
- LONG ISLAND
- MID-HUDSON
- MOHAWK
- NORTH COUNTRY
- SOUTHERN TIER
- WESTERN NEW YORK

Source: USDA Census of Agriculture (downloaded from ag-analytics.org)

Note: Dairy cow inventory measured in head

**Dairy cow: Operations with inventory**

- CAPITAL REGION
- CENTRAL NEW YORK
- FINGER LAKES
- LONG ISLAND
- MID-HUDSON
- MOHAWK
- NORTH COUNTRY
- SOUTHERN TIER
- WESTERN NEW YORK

Source: USDA Census of Agriculture (downloaded from ag-analytics.org)
Milk production and productivity increasing statewide

Source: USDA National Agricultural Statistics Service (downloaded from ag-analytics.org)
Beef production trends vary by region

**Beef inventory**
(Unit: 10,000)

- **CAPITAL REGION**
- **CENTRAL NEW YORK**
- **FINGER LAKES**
- **LONG ISLAND**
- **MID-HUDSON**
- **MOHAWK**
- **NORTH COUNTRY**
- **SOUTHERN TIER**
- **WESTERN NEW YORK**

Source: USDA Census of Agriculture (downloaded from ag-analytics.org)
Note: Beef inventory measured in head

**Beef: Operations with inventory**

- **CAPITAL REGION**
- **CENTRAL NEW YORK**
- **FINGER LAKES**
- **LONG ISLAND**
- **MID-HUDSON**
- **MOHAWK**
- **NORTH COUNTRY**
- **SOUTHERN TIER**
- **WESTERN NEW YORK**

Source: USDA Census of Agriculture (downloaded from ag-analytics.org)
Horse population stable to increasing

Horses & ponies inventory
(Unit: 10,000)

Source: USDA Census of Agriculture (downloaded from ag-analytics.org)
Note: Horses and ponies inventory measured in head

Horses & ponies: Operations with inventory

Source: USDA Census of Agriculture (downloaded from ag-analytics.org)
Corn and soybean insurance enrollment below national levels

Note: acres enrolled include “prevented planting”
Vegetable enrollment generally increasing

Note: acres enrolled include “prevented planting”
Apple farms have high levels of crop insurance enrollment.
Crop insurance trends - corn

Share of corn acres enrolled in crop insurance

 Shares acres enrolled = acres enrolled / acres harvested; acres enrolled includes prevented planting
Crop insurance coverage trends - soybeans

Share of corn acres enrolled in crop insurance

- Shares acres enrolled = acres enrolled / acres harvested;
- acres enrolled includes prevented planting

Year: 2002

Year: 2007

Year: 2012
Crop insurance coverage trends - apples

Share of apple acres enrolled in crop insurance

Year: 2002

Apple enrollment
- Less than 25%
- 26% - 50%
- 51% - 75%
- 76% or more

Year: 2007

Share of apple acres enrolled in crop insurance

Year: 2012

Share of apple acres enrolled = acres enrolled/acres harvested
Crop insurance coverage trends - grapes

Share of grape acres enrolled in crop insurance

Year: 2002

Share of grape acres enrolled in crop insurance

Year: 2007

Share of grape acres enrolled in crop insurance

Year: 2012

Shares acres enrolled = acres enrolled/acres harvested
Crop insurance coverage trends - potatoes

Share of potato acres enrolled in crop insurance

Shares acres enrolled = acres enrolled/ acres harvested; acres enrolled includes prevented planting
Crop insurance coverage trends – processing beans

Share of processing beans acres enrolled in crop insurance

Shares acres enrolled = acres enrolled/ acres harvested; acres enrolled includes prevented planting

Year: 2002

Year: 2007

Year: 2012
Internet access is improving for NY farms

Source: USDA Census of Agriculture (downloaded from ag-analytics.org)
Looking forward

• Broadly speaking, over time the farm sector in New York has become more productive with less acres
  • There will be continued pressure to increase productivity
• Price and production volatility (risk management) is a critical issue for NY agriculture
  • Crop insurance is used widely in several areas
• Continued pressure on margins is expected for 2016, through weak crop and milk prices, strong land prices, continued wage pressure, and overall slow responses of input suppliers to declining commodity prices nationwide
  • The experience of specialty crop and livestock producers may not reflect these broader trends
Jennifer Ifft
Assistant Professor
Mueller Family Sesquicentennial Faculty Fellow in Agribusiness and Farm Management
Phone: (607) 255-4769
Email: jifft@cornell.edu
Webpage: http://dyson.cornell.edu/people/profiles/ifft.php