High Crop Prices: The Good, The Bad, and The Ugly

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High Crop Prices: The Short-Run

- Crop farmers become euphoric
  - $7/bu corn, $14/bu soybeans, and $1/lb cotton
  - Never thought they will see the day...
  - Paying bills—not a problem

- Livestock/poultry/dairy producers, well...
  - They didn’t think they would see the day either!!
  - Had become accustomed to buying feed for well below the its cost of production
  - Put many out-of-business
High Crop Prices: The Short-Run

• “Ingredient” demanders complain loudly
  – Food sector threatens to, or raise, prices
  – Even though the farm ingredients’ share of food costs is often very small (bread, cereal…)
  – The impact on meat does not hit until months or years later

• Rural communities and farmer trade areas
  – Reminded of the impact of farmers having ready cash
  – Good time to be a John Deere or pickup dealer
High Crop Prices: The Second Impact

- Farm resource and input prices sky rocket
  - Seed, pesticide, fertilizer suppliers raise prices (and not just a little bit)
  - Land cash rents and land values increase at double digit rates per year
  - Returning to “previous” price levels would be a real problem

- Livestock production is adjusted downward; prices and profits increase

- Now food prices are affected more directly
**High Crop Prices: The Long-Run**

- Both the crop and livestock production sectors become more concentrated
  - Many livestock/poultries/dairies did not survive—fewer operations
  - Crop farmers who are already large-scale, well-capitalized, and now cash-rich, expand even faster
- Crop producers here and abroad expand output like crazy
  - Guess what happens then…
High Crop Prices: The Long-Run

• Historically, crop prices plummet
  – Land prices drop, sometimes by a lot
  – In the U.S., government usually comes to the rescue but does not make it all better, just better
  – Years of “excess” crop production and “low” prices return with a vengeance

• Historically, but not always, right?
• Wrong: No exceptions so far
But Things Are Different This Time

• Could be...
  – China could become an insatiable demander of US commodities; other countries too
  – World population is projected to double
  – Weather “abnormalities” could escalate, jeopardizing yields worldwide
  – Doubling of energy prices or other factors could limit use of agricultural inputs
  – Water shortages, etc., etc.

• Could be, but a certainty—it is not
Things to Consider...

- Repeat of ethanol grain demand growth over the next 5 years will not happen.
- That essentially leaves exports as the source of U.S. demand growth, & implies…
  - Developing countries willingly source food needs outside their country.
  - The U.S. will be the dominant provider of any increase that occurs.
- And then there is the tendency to focus on demand growth and not supply potential.
Do Developing Countries Willingly Out-Source Food?

• FOOD IS DIFFERENT
  – Food is a national security issue—just like military security is to the US. So …
    • Countries want to domestically produce as much of their food staples as possible
    • Political considerations
      – Need to feed the population
      – Need to provide a living for millions in agriculture
      – Need an orderly exit of workers out of agriculture
  – Food imports from outside countries
    • Often do not grow as fast as a straight economic analysis might suggest
    • Don’t increase much when prices drop
Would the U.S. Fare Well If Grain Export Demand Explodes?

• The obvious answer would seem to be YES
• Look at soybean and cotton exports in recent years
• But has the reality of crop export growth over recent decades fallen short of expectations/reality/rhetoric?
• Well, let’s go back a few decades and see
Export Demand Did Explode in the 1970s

Index of US Population, US Demand for 8 Crops and US Exports* of 8 Crops 1979=1.0
The Following Decades...

Index of US Population, US Demand for 8 Crops and US Exports* of 8 Crops

1979=1.0
**US and World exports of 5 Grains and Soybeans, 1980-2010**

- **World Exports of 5 Grains and Soybeans**: 360 MMT
- **US Exports of 5 Grains and Soybeans**: 217 MMT
US Percent of and World exports of 5 grains and soybeans, 1980-2010

US 5 Grains and Soybean Exports as % of World

58% in 1980

37% in 2008
US Soybean Exports Are Sure Enough Going Up

Million Metric Tons

US Exports

But Brazil’s Exports Have Gone Up by More...
So the US Share of World Exports Has Dropped Precipitously

US Soybean Exports as % of World Exports
Post-70s: Developing-Country Competitors Did Well

Developing competitors: Argentina, Brazil, China, India, Pakistan, Thailand, Vietnam

15 Crops: Wheat, Corn, Rice, Sorghum, Oats, Rye, Barley, Millet, Soybeans, Peanuts, Cottonseed, Rapeseed, Sunflower, Copra, and Palm Kernel
Before We Leave Exports...

• Our President has set a goal of doubling the value of US exports in 5 years
• Our Sec. of Agr. says don’t expect that from agriculture
  – Wise warning—In fact, odds are that agricultural export value will drop, not increase, in the next few years
  – Most of the mammoth increase in the value of exports over the last 3 years came from price not volume (will prices continue to grow?)
US Corn, Soybeans, and Wheat – Value and Volume of Exports

Value of Exports

Volume of Exports


0 5 10 15 20 25 30


0 50 100 150 200 250 300

Volume of Exports

Billion Dollars
Finally, It’s Easy to Underestimate Supply Growth

• Let’s begin with the US:
  – Investment in yield enhancing technology (300 bu./ac on best land in a few years?—national average a decade or two later??)
  – Potential conversion to cellulosic feedstocks for ethanol expansion
  – Conversion of Conservation Reserve Program Acreage and hay/pasture land to crop production
It’s Easy to Underestimate Supply Growth

• International supply growth—yield
  – Development and adoption of drought/saline/disease resistant crops
  – Globalization of agribusiness: Near universal access to the new technologies world-wide
  • Narrowing of technology and yield differentials between the developed and developing world
It’s Easy to Under Estimate Supply Growth

- International supply growth—acreage
  - *Long-run* land potentially available for major crops
    - Savannah land in Brazil (250 mil. ac. -- USDA says 350)
    - Savannah land in Venezuela, Guyana, and Peru (200 mil. ac.)
    - Land in former Soviet Union (100 mil. ac.)
    - Arid land in China’s west (100 mil. ac. GMO wheat)
    - Savannah land in Sub-Saharan Africa (300 mil. ac. -- 10 percent of 3.1 bil. ac. of Savannah land)

- Supply growth has always caught and then surpassed demand growth (and it does not take long)
Policy for All Seasons

• A policy that
  – Protects farmers during “hard times”
  – Does not pile-on during the “good times”
    • In contrast Direct Payments
      – are paid even though prices are well north of all costs
      – but provide insufficient help when prices are depressed
    • In contrast Revenue Insurance
      – protect farmers’ “pure” profits when prices are really high
      – but when prices fall and remain below the cost of production, revenue insurance guarantee a percentage of those even-below-variable-cost prices

• A policy that
  – Helps ensure supply availability for domestic and export markets
**Policy for All Seasons**

- **Assume the unexpected will happen**
  - Random policy and weather events do occur—**Plan for them**

- **Establishment of Grain/Oilseed/Food Reserves**
  - Moderate impacts of random policy and weather events by providing stable supply until production recovers
  - Operated/overseen by a multinational commission
  - Stores strategically purchased reserves
Policy for All Seasons

• Keep productive capacity well ahead of demand
  – Public investment in yield enhancing technologies and practices

• Provide means to hold arable land in rotating fallow during periods of overproduction
  – This land could then quickly be returned to production in the case of a crisis
Thank You

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