

FarmEcon LLC

A source of information on global farming  
and food systems

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# *Consumer Demand for Canadian Poultry & Eggs*

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# *First, the lawyer told me to say...*

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# *What does that mean?*

Why do people eat  
poultry products?



*Even more important...*

How **much** poultry  
meat and eggs do  
people want to eat?



*And as important...*

**At what price?**



# *Start with the big picture*

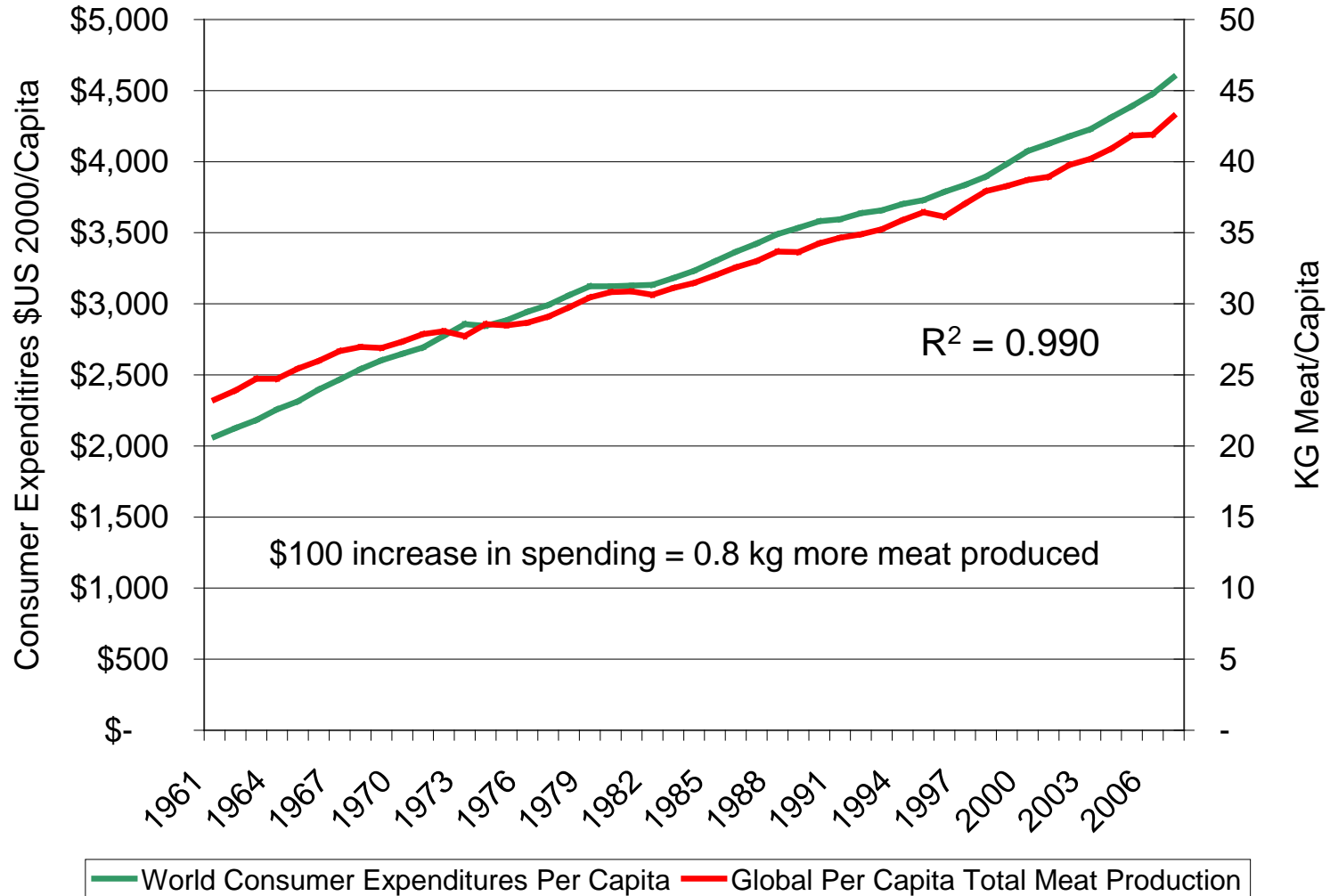
## *What drives the world's meat and egg economy?*

- ❖ Only 3 things really matter much
  - ❖ How many people are there?
  - ❖ How much money do they have to spend?
  - ❖ How much are they willing to spend for meat and eggs?
- ❖ From 1961 to 2007
  - ❖ **Per capita** meat consumption grew from 23 to 43 kg
    - $R^2$  with real consumption spending per capita was 0.990
  - ❖  $R^2$  with **total** meat consumption and **total** real consumer spending was 0.999 (**GDP + Population effect**)
  - ❖ **Per capita** egg consumption grew from 4.9 to 10.2 kg
    - $R^2$  with real consumption spending per capita was 0.940



# More Spending/Person = More Meat/Person

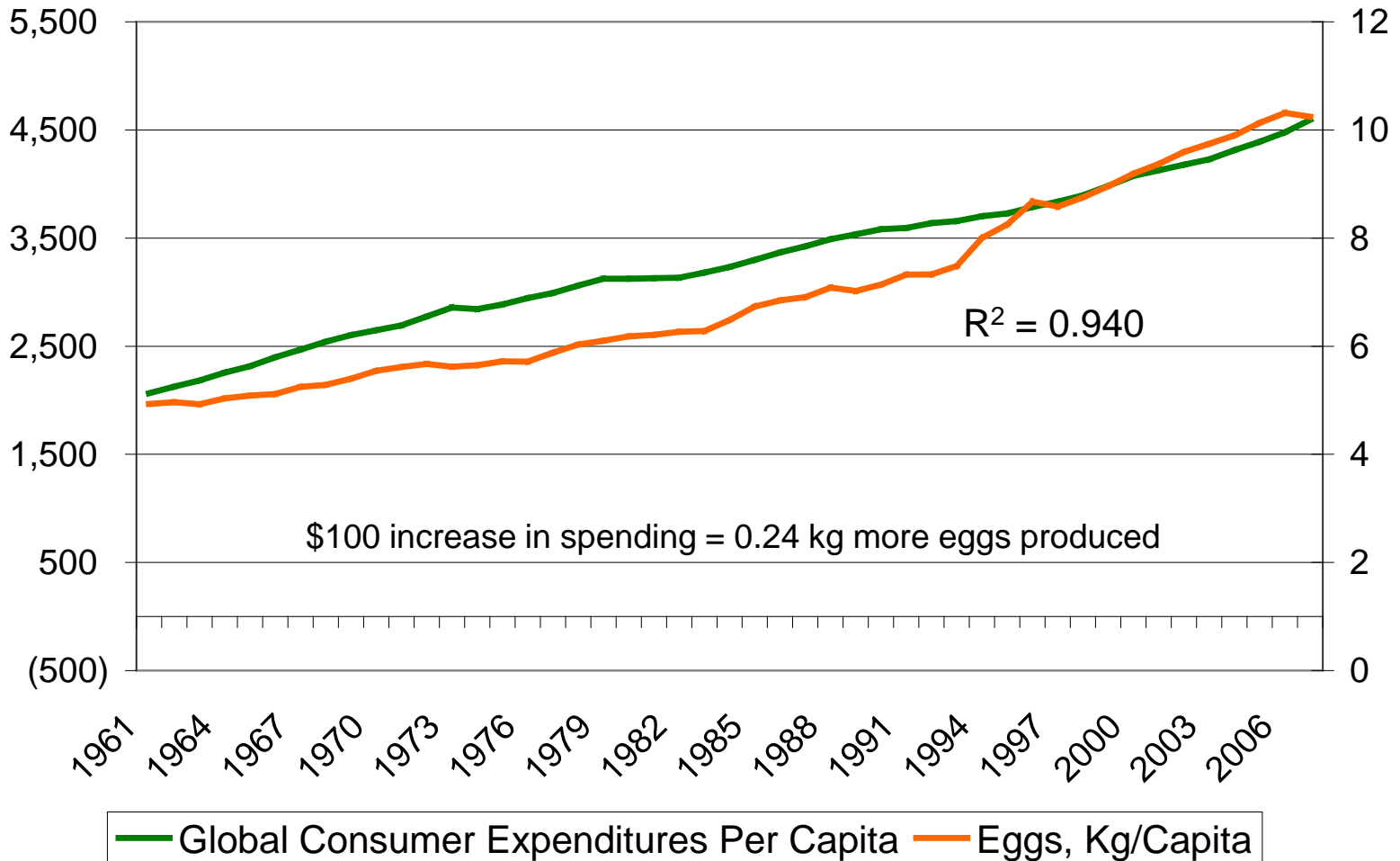
On average +10% Spending = +8.7% more meat





# More Spending/Person = More Eggs/Person

On average +10% Spending = +11.3% more eggs



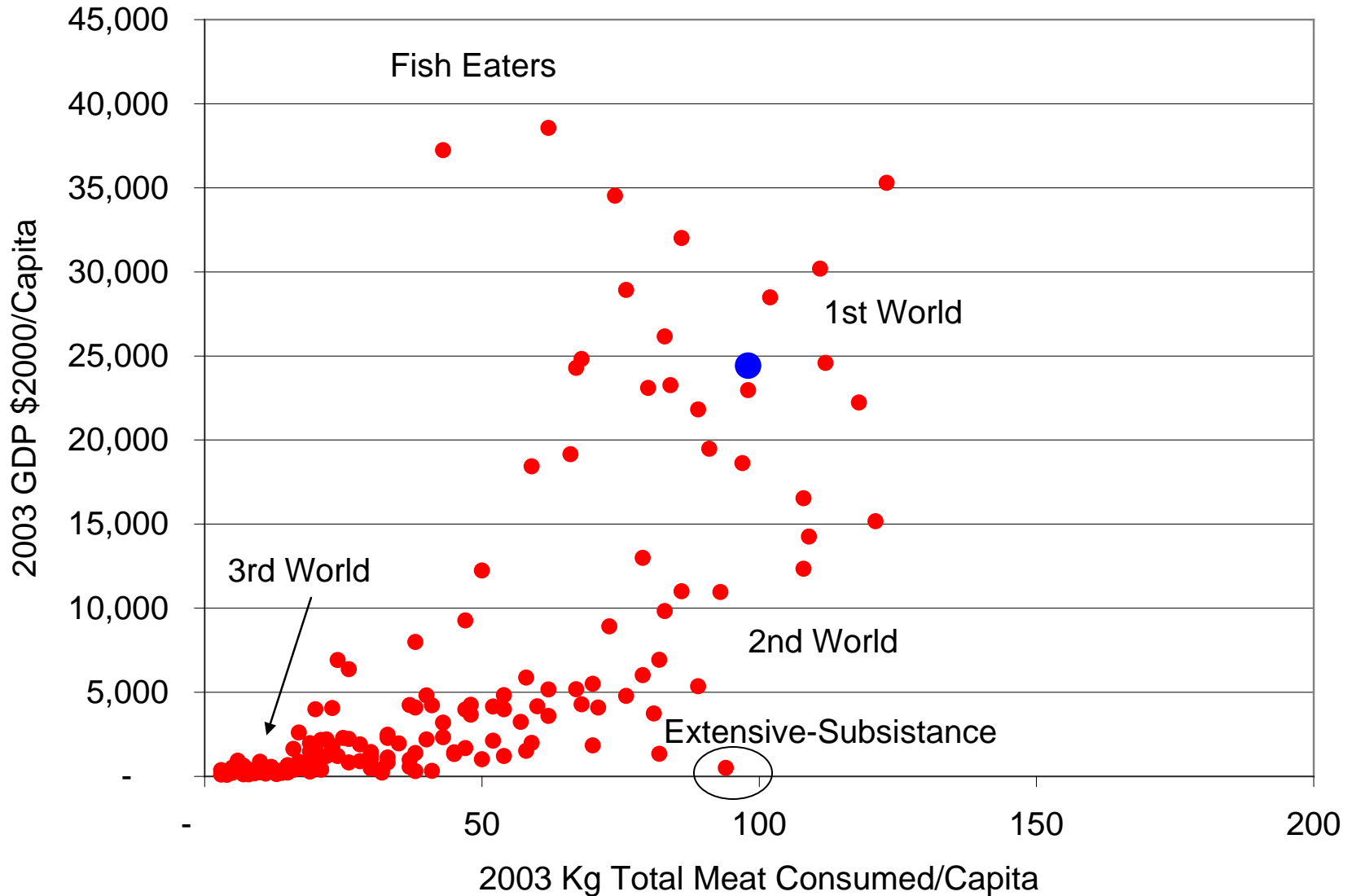


## *But, you may ask, what about...*

- ❖ Poultry, egg, and other meat prices?
  - ❖ Too stable to affect global meat production/consumption
  - ❖ May have affected shares of meats in the diet
  - ❖ Declining **real** prices have added to consumption trend
- ❖ Consumer demographics, tastes, and preferences?
  - ❖ Little effect on global meat and egg consumption over time
  - ❖ Significant affects by country (next 2 slides)
- ❖ Promotion programs?
  - ❖ May have affected shares, but no apparent total effect
- ❖ Trade?
  - ❖ Has probably boosted global production

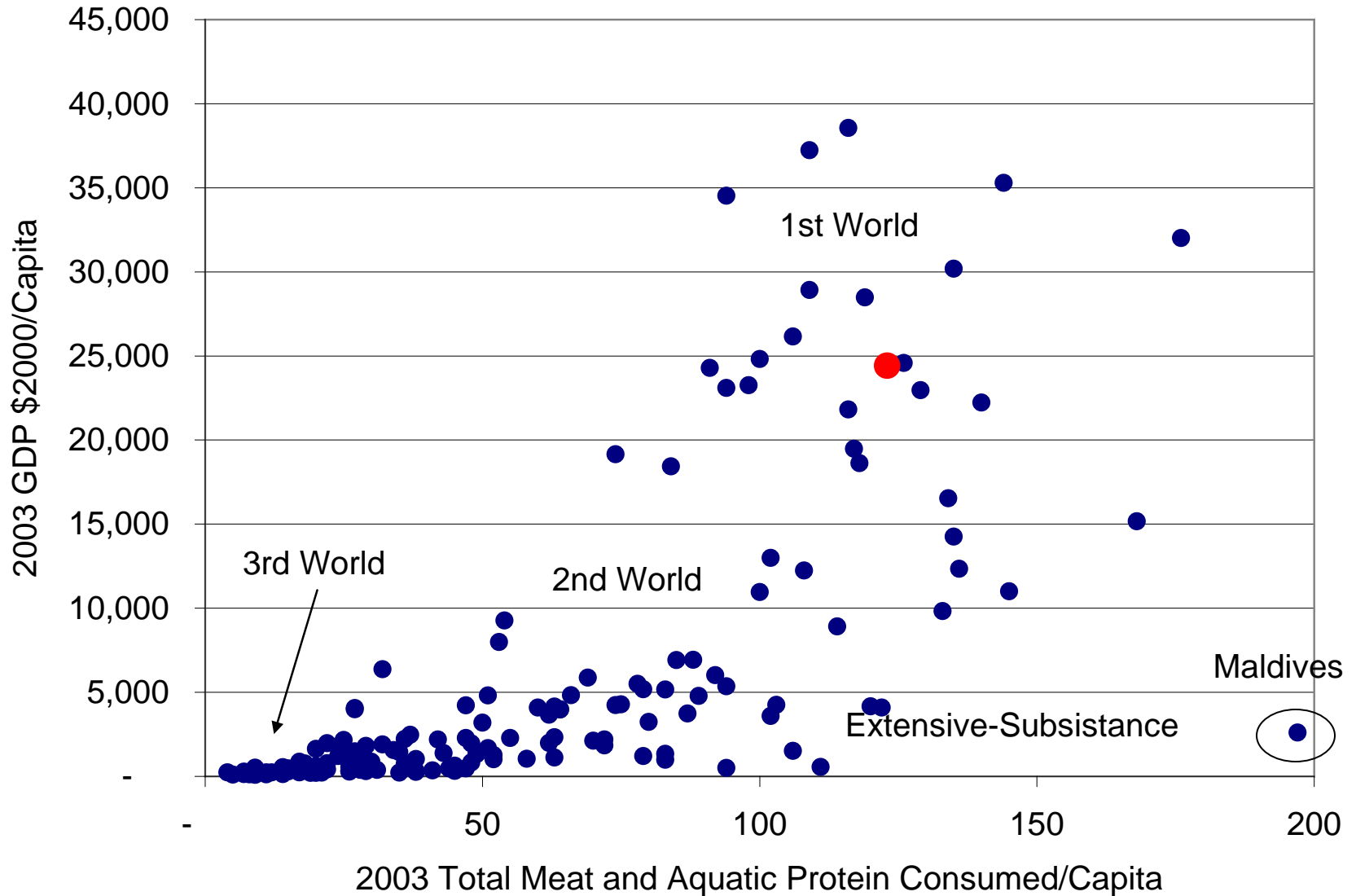


# Meat/GDP; 158 countries





# Meat/Aquatic/GDP; 158 countries





## *Why do we eat poultry & eggs in Canada?*

- ✚ More complex than the global picture, but the basic drivers are the same
- ✚ Supply management  $\neq$  consumer management
- ✚ Long term drivers:
  - ✚ Real income
    - Drives total real consumer spending
      - Drives real food spending
  - ✚ Costs of production
  - ✚ People: How many, preferences and demographics
- ✚ Poultry producers' product innovation
- ✚ Other factors are also very important



# *What economic forces drive poultry product consumption?*

- ❖ Major macroeconomic drivers:
  - ❖ GDP/income/consumer spending
  - ❖ Population
  - ❖ Seasonality
  - ❖ Competing meat prices
- ❖ Use **annual** data and seasonality disappears
- ❖ Use **total** consumption and **total** income, and population is included



# *Major drivers impacting poultry consumption growth rate*

<i>Driver</i>	<i>Decrease</i>	<i>Increase</i>
<b>Real Income</b>	-	+
<b>Real Costs</b>	+	-

1991-2006: Both factors positive, promoted consumption growth

2007-Mid 2008: Real income a declining positive, real costs a negative

Mid 2008-2009: Real income and real costs both negative



# *Major drivers impacting poultry consumption growth rate*

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*2008-2009*

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# Estimates of “Real GDP” elasticity for Canadian poultry and meat 1961-2007

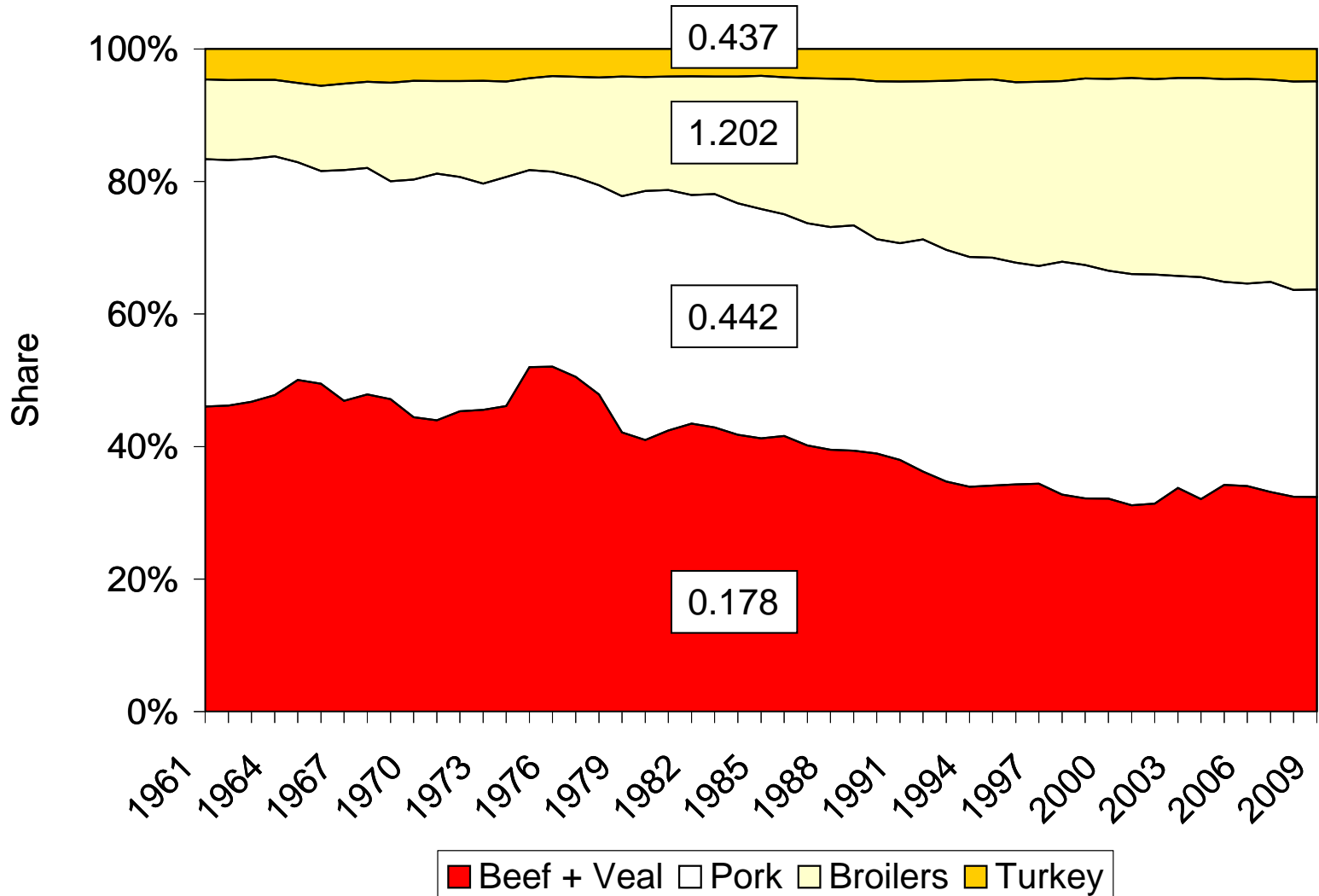
<i>Product</i>	<i>\$1 Billion Real GDP</i>		
	<i>Real GDP Elasticity*</i>	<i>Consumption Impact (Tons)</i>	<i>R<sup>2</sup></i>
Broiler	1.202	828	0.99
Turkey	0.437	46	0.90
Eggs**	0.223	61	0.90
Beef	0.178	133	0.37
Pork	0.442	316	0.90

\* % consumption increase for 1% increase in real GDP (\$CA 2000)

\*\* 1988-1998 impact of “cholesterol” -26,500 tons per year (-8%) (t = -7.8)



# Meat shares reflect GDP elasticity





## *Other possible factors...*

- ⊕ Population demographics/diversity?
- ⊕ HRI vs. retail sales channel?
- ⊕ Labor force trends?
- ⊕ Food scares and diet information?
- ⊕ Relative food safety records of meats?
- ⊕ Product image?
- ⊕ Changes in basic product form and mix?
- ⊕ Product costs/prices?



# *Macroeconomic outlook 2010-2011*

- ⊕ Best case – recovery begins in Q4 2009 with 2-4% real consumer spending growth in 2010/2011
- ⊕ Worst case – recession lingers into 2010
- ⊕ Unemployment not likely to drop until 2010
- ⊕ Likely to see a U-shape, not a V-shape, recovery in GDP, income, and food spending
- ⊕ Risks of higher inflation and interest rates in 2010 forward

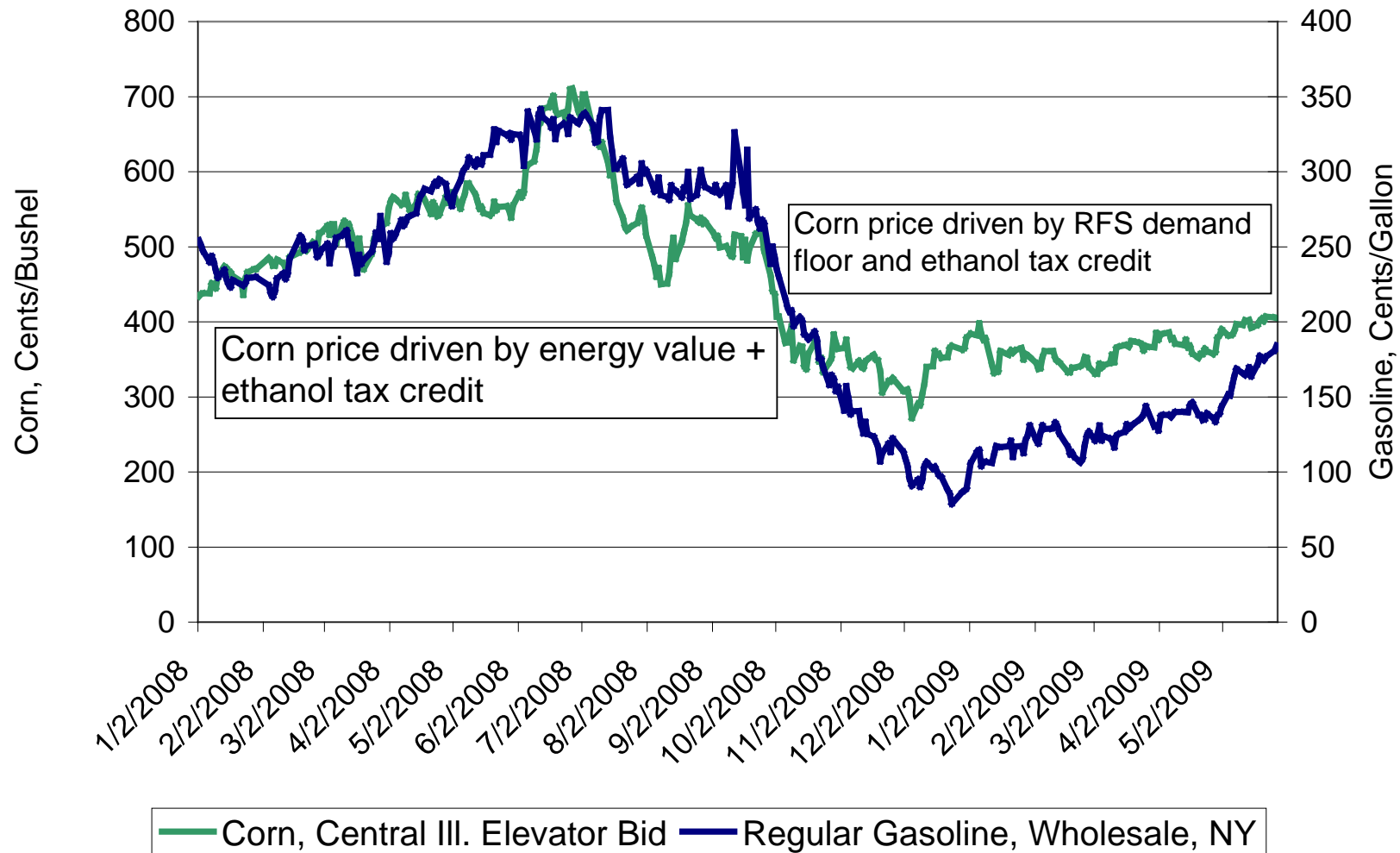


# *Feed cost outlook 2010-2014*

- ❖ No return to 2005 feed costs
- ❖ Feed costs linked to energy prices by biofuels
- ❖ A recovering economy can drive energy and feed costs higher
- ❖ U.S. ethanol RFS increases from to 10.5 bg in 2009 to 12.0 bg in 2010
- ❖ Feed cost volatility likely to be much higher than anytime in the past



# The corn-ethanol price link





# U.S. Broiler Feed Costs 2005-2008

	2005	2006	2007	2008
Corn Price, Central Ill. (\$/Bu.) + \$0.50	\$2.40	\$2.91	\$4.01	\$5.40
Soybean Meal Price (\$/ton , 47%) +\$20	\$211	\$197	\$256	\$357
Other Costs (\$/ton)	\$400	\$400	\$400	\$450
Broiler Feed Costs (¢/lb, Live)	15.72¢	16.14¢	20.16¢	26.56¢
Broiler Feed Costs (¢/lb, RTC)	23.46¢	24.09¢	30.09¢	39.64¢
Lowest Month Broiler Feed Costs (¢/lb, RTC)	21.68¢	22.25¢	27.77¢	32.05¢
Highest Month Broiler Feed Cost (¢/lb, RTC)	25.59¢	27.79¢	35.56¢	47.32¢
Broiler Feed Costs (¢/lb, RTC) Range	3.91¢	5.54¢	7.79¢	15.27¢

How well will the Canadian supply management system cope with almost 4x historic cost volatility?

Added \$0.50/bu. for corn and \$20/ton for soybean transportation and handling  
Based on 1.9:1 FCR, 55% corn, 35% SBM, 10% Other



## *Feed cost range for 2010-2014*

- ✚ What will energy prices do?
- ✚ Corn has a RFS-driven floor at about \$US 3.00-\$3.50 cash Midwest
- ✚ Ceiling is set by how high oil might go and what government does with biofuels program
- ✚ Protein and by-product feeds follow corn
- ✚ Probably the biggest challenge the industry faces over the next 5 years



## *The very, very, bottom line:*

Recent issues in global poultry consumption:

**First**, higher real costs = higher poultry and egg prices

**Second**, the 2008/2009 recession has decreased incomes and caused weak demand

**Both** are negatives for poultry production and consumption

**2010** - improved incomes, slightly higher costs

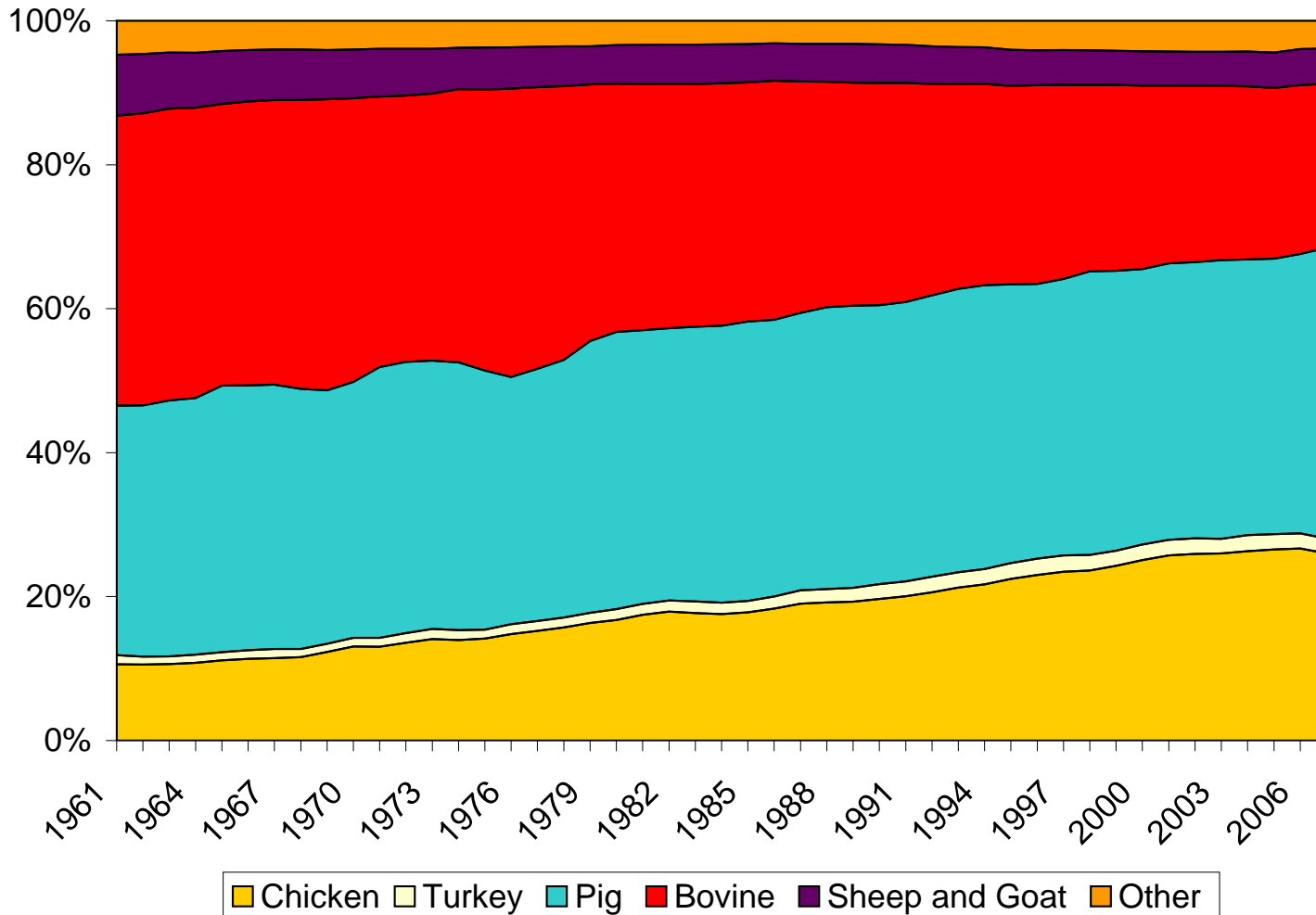


## *But more importantly...*

- ✚ Why is GDP tightly linked to poultry and egg demand?
- ✚ What basics created that link?
  - ✚ Quality products
  - ✚ Safe products
  - ✚ Production system controls
  - ✚ Competitive pricing vs. other proteins
  - ✚ Innovation in production and processing
  - ✚ Being close to the customer and consumer
  - ✚ Excellent animal husbandry and disease prevention
  - ✚ Environmental stewardship
  - ✚ And more...



# *Global meat production shares... Not a result of economists' equations!*





# *Finally...*

- ✦ Increases in poultry product consumption are not guaranteed, even with real economic growth
- ✦ Income is opportunity, not sales
- ✦ Continual improvement is essential
- ✦ **Don't forget the basics!**