Supply-Managed Supply Chains: An Assessment

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Supply Chain Performance and SM Programs

- SM chains are not monopolies, they are regulated cases of multiple marginalization;
- SM programs are exercises in rent-sharing between:
  - producers,
  - a few processors,
  - and a few retailers

  at the expense of consumers

- SM programs are also exercises in rent-sharing between producers from different provinces;
- Restricting output upstream discourages price competition downstream (processing, retail);

- High margins + high costs = high prices = INEFFICIENCY (DWL)

  =Regressive redistribution

« …**poverty statistics show that 16% of Canadians live under the poverty line and that children are worse off with an estimated 20% living in poverty** ». Larue, B. Can. J. of Agric. Econ. 1994, 42:451-461.

Table 1. Annual per capita consumption of dairy products for the three poorest and the three riche categories of households for 1990.

	cat. #1	cat.#2	cat.#3	cat.#8	cat.#9	cat.#10
gross revenue per household ($)	8677	14939	21912	60486	74339	117925
gross revenue per capita ($)	6475	8586	10848	19449	23303	35307
whole milk (l)	27.75	27.32	27.02	24.46	14.85	15.02
2% milk (l)	49.60	53.52	49.35	55.29	58.08	54.49
yogurt (l)	4.81	4.45	3.17	3.88	4.76	3.89
butter (kg)	2.79	2.75	2.52	2.86	3.10	3.41
cheddar (kg)	2.06	1.40	1.37	2.21	1.79	1.92
ice cream (l)	10.05	8.79	9.37	7.16	8.25	8.58

source: GREPA (1993).

"Canada's SM policies are highly regressive, imposing a burden of approximately 2.3 percent ($339) of income per year on the poorest households, compared to 0.5 percent ($554) for the richest households." Cardwell, R., Lawley C. and D. Xiang, Can.Public Pol. 2015, 41,1.

Retailers squeeze Processors, Processors squeeze Farmers…

“**The mean of the bargaining power of retailers, *δ*, is robust across scenarios at about 0.91.** The mean number of processors, *N*, is not affected by the assumption about threat points and is approximately equal to 1.86, which reflects the highly concentrated nature of food processing in Canada. **The mean of the bargaining power of processors when bargaining with farmers, *σ*, is 0.91 when threat points are zero and 0.85 in the alternative case.**”

Pouliot, S. and B. Larue, Can. J. of Econ. 2012, 45:903-924.

Yet, the average chicken farmer is sitting on a few millions $ of production quotas!

SM Programs: A Regulatory Challenge

- The institutions: A+ for survival, but weak;
- Difficult to reform because SM programs are under shared federal and provincial jurisdictions;
- Difficult to reform because regulating margins requires detailed information about costs and prices;
- Institutional capture by industry;
- Other countries too … (ex., New Zealand’s dairy and water quality)

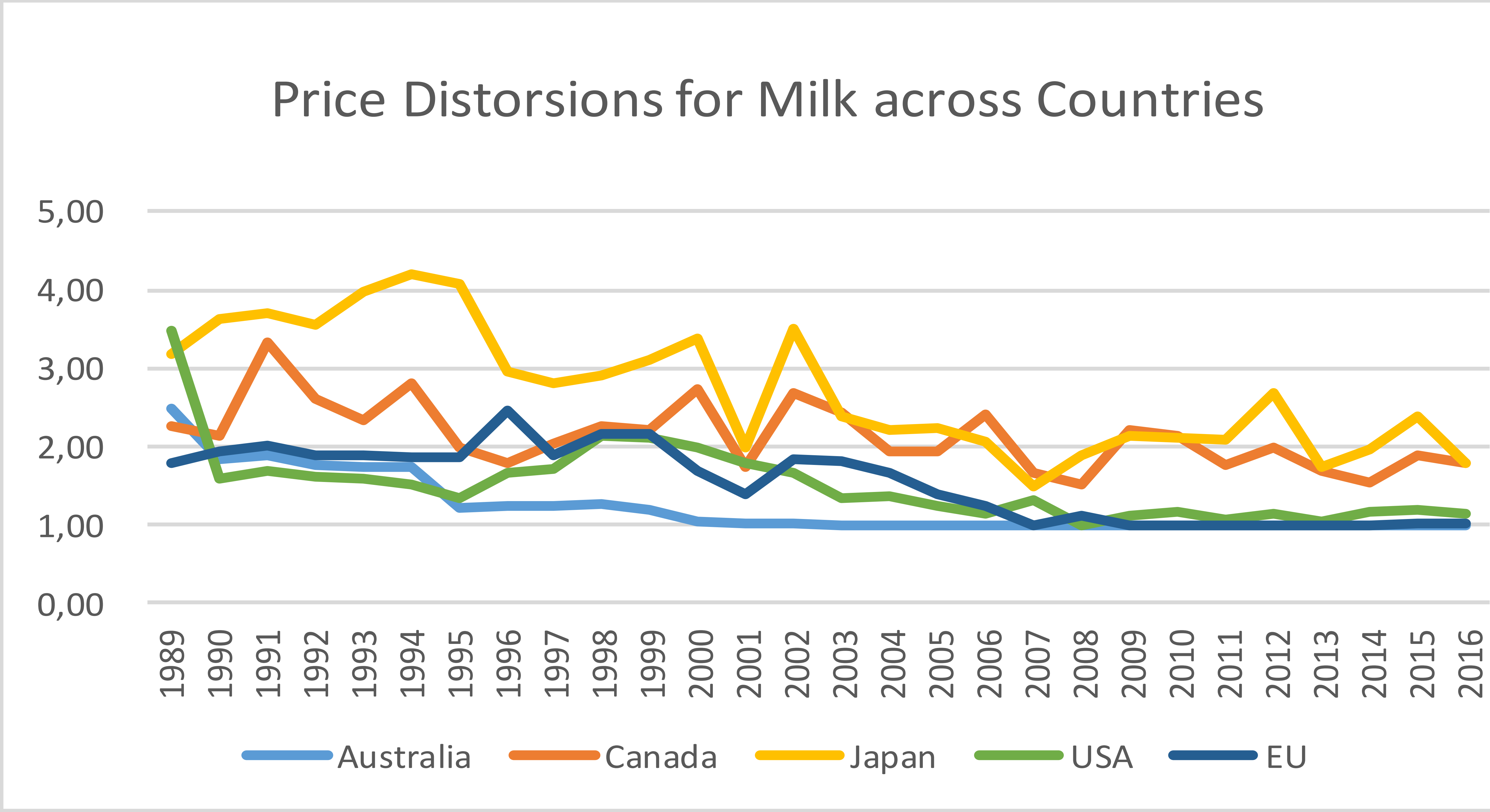
A Few Examples of Regulatory Failures

- Tariff-Rate-Quotas with prohibitive over-quota tariffs;
- Interprovincial pricing regulations;
- Interprovincial allocations of the production;
- Cost of production (COP) surveys;
- Minimum and maximum milk retail prices

(indexation milk retail costs in Quebec= 0,3*Industrial Pindex + 0,4*Canadian Household disposable income + 0,3*Quebec CPI).

Markets for production quotas are inefficient

- Ceilings on production quota prices;
- Tying quota to location of production;
- Limit on quantity that can be purchased in one session;
- Thin markets;
- One sided markets;
- Lenghty suspension of quota trades (QC chicken);
- No inter-provincial trade.



Price Distorsions for Milk across Countries
5,00
4,00
3,00
2,00
1,00
0,00
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Australia
Canada
Japan
USA
EU

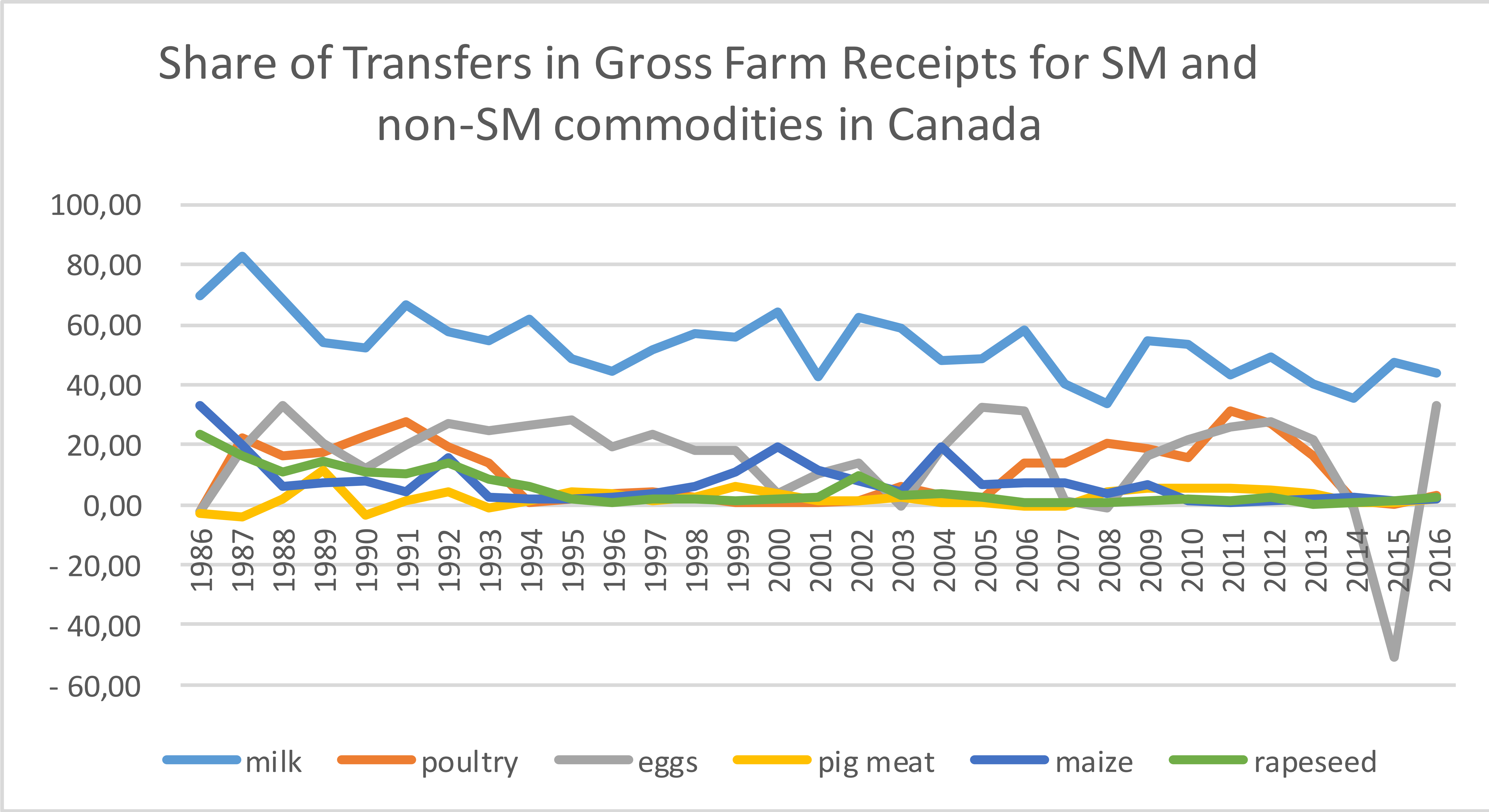
Comparison of Retail Prices

where is the data???

- Whole fortified milk US city (northeast region) average 1 gallon (3.8l) Dec.2017: US$3.155 (US$3.604) or:
  $4.15(4.74) in 4l equivalent vs $6.58 = Quebec City 4l homog.
- Chicken breast 1 lb. $3.99 ($4.66) US vs $6.99 QC (promo) vs $7.38 StatCan « chicken » national average Nov. 2017
- Eggs grade A large 1doz.: $2.27 ($2,91) US vs $1.94 (QC promo)-$3.50 (QC regular) vs $3.21 StatCan national ave. Nov. 2017.
- Ground beef lean & extra lean 1 lb. $6.88 vs $6.59 QC lean. For regular ground beef: $4.49-$4.64 US vs $5.61 StatCan national ave. Nov.2017.

Retail Margins: Evidence from unregulated plastic

- QC retailers A,B: 2% milk 2l container with a plastic cap: $4.79
- QC retailer C: 2% milk 2l container with a plastic cap: $3.39
- QC retailers A,B : 2% milk 2l container without a cap: $3.60=max Price
- Retailers A and C are 1 km apart, and Retailer B is within 5 km from them.



Share of Transfers in Gross Farm Receipts for SM and non-SM commodities in Canada
100,00
80,00
60,00
40,00
20,00
0,00
- 20,00
- 40,00
- 60,00
1986
1987
1988
1989
1990
1991
1992
1993
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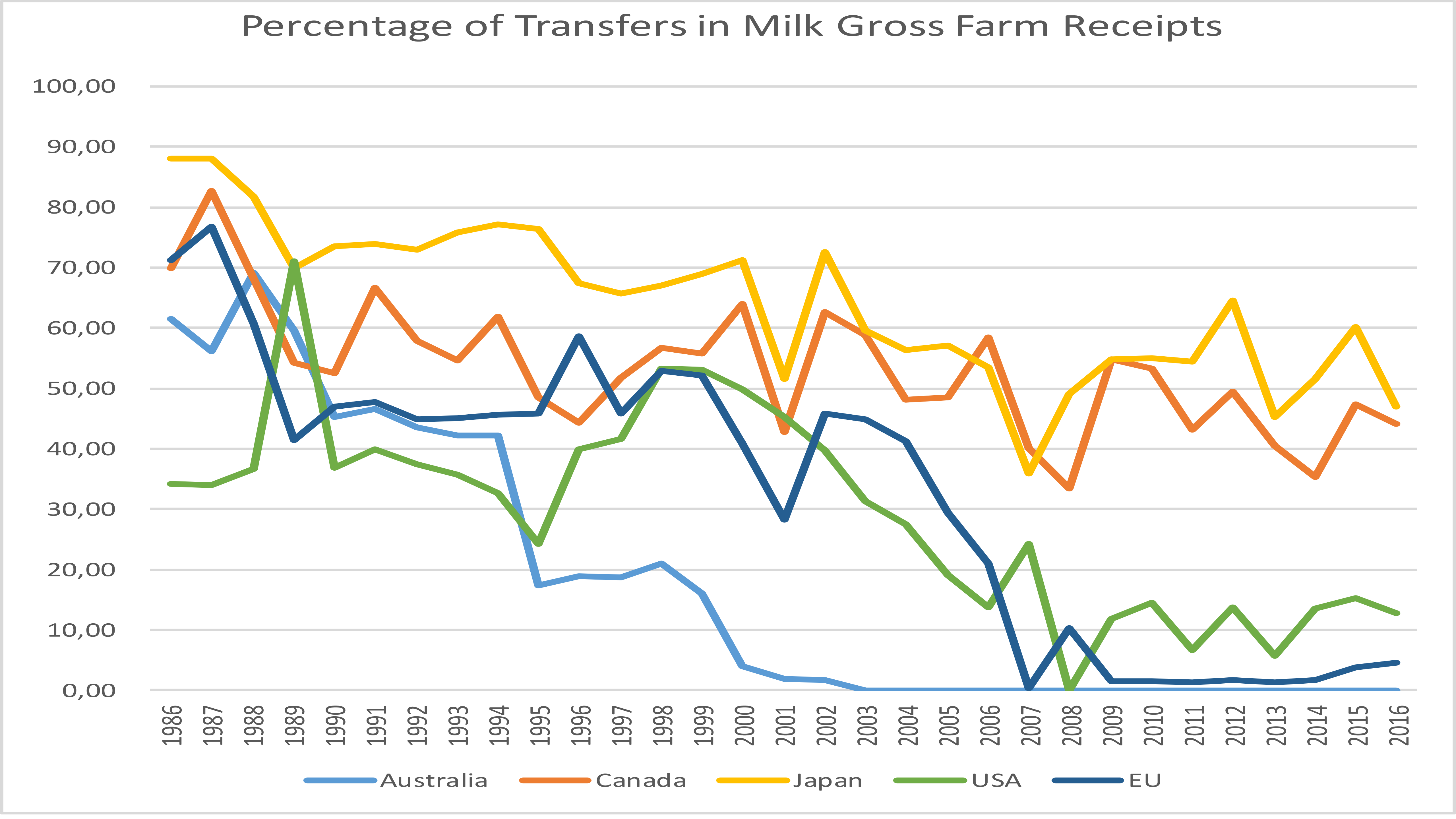
pig meat
maize
rapeseed


Percentage of Transfers in Milk Gross Farm Receipts
100,00
90,00
80,00
70,00
60,00
50,00
40,00
30,00
20,00
10,00
0,00
1986
1987
1988
1989
1990
1991
1992
1993
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2003
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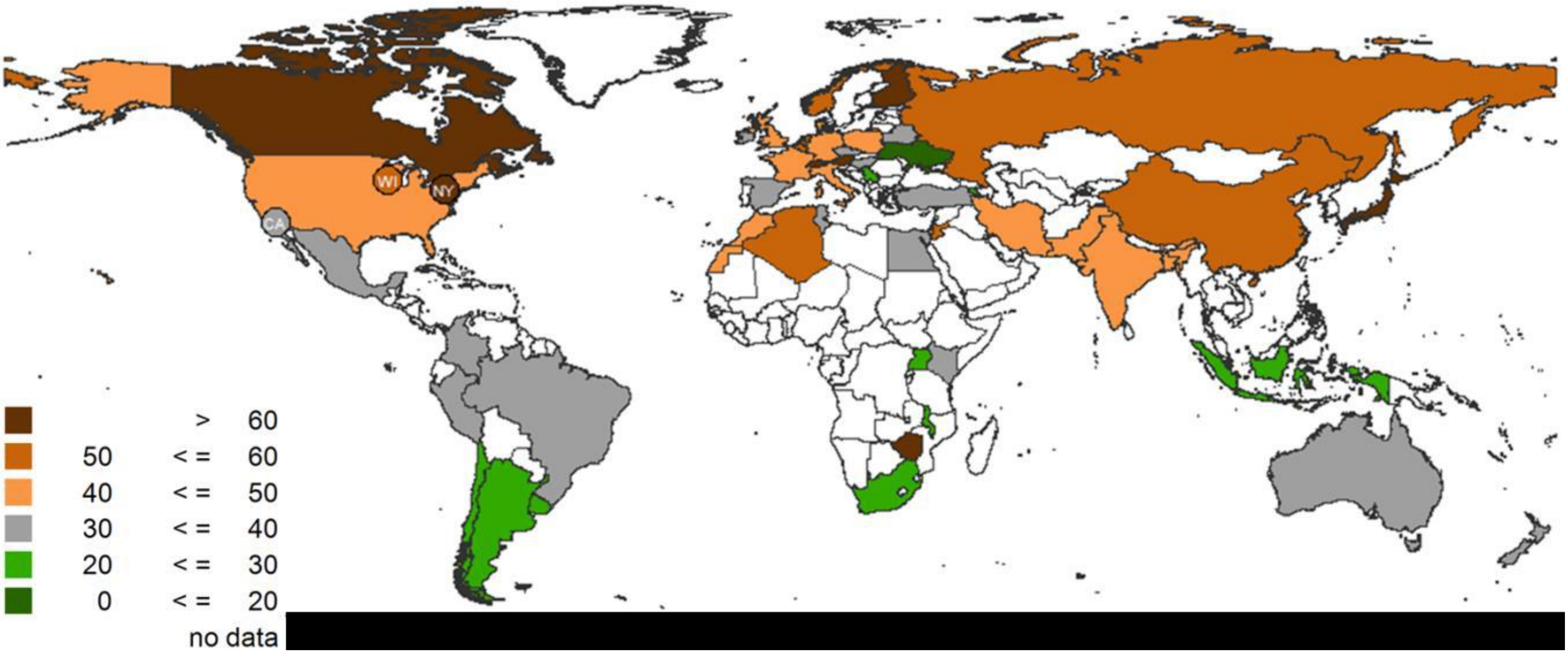
Canada
Japan
USA
EU

2015 Milk Costs of Production in US$/100kg



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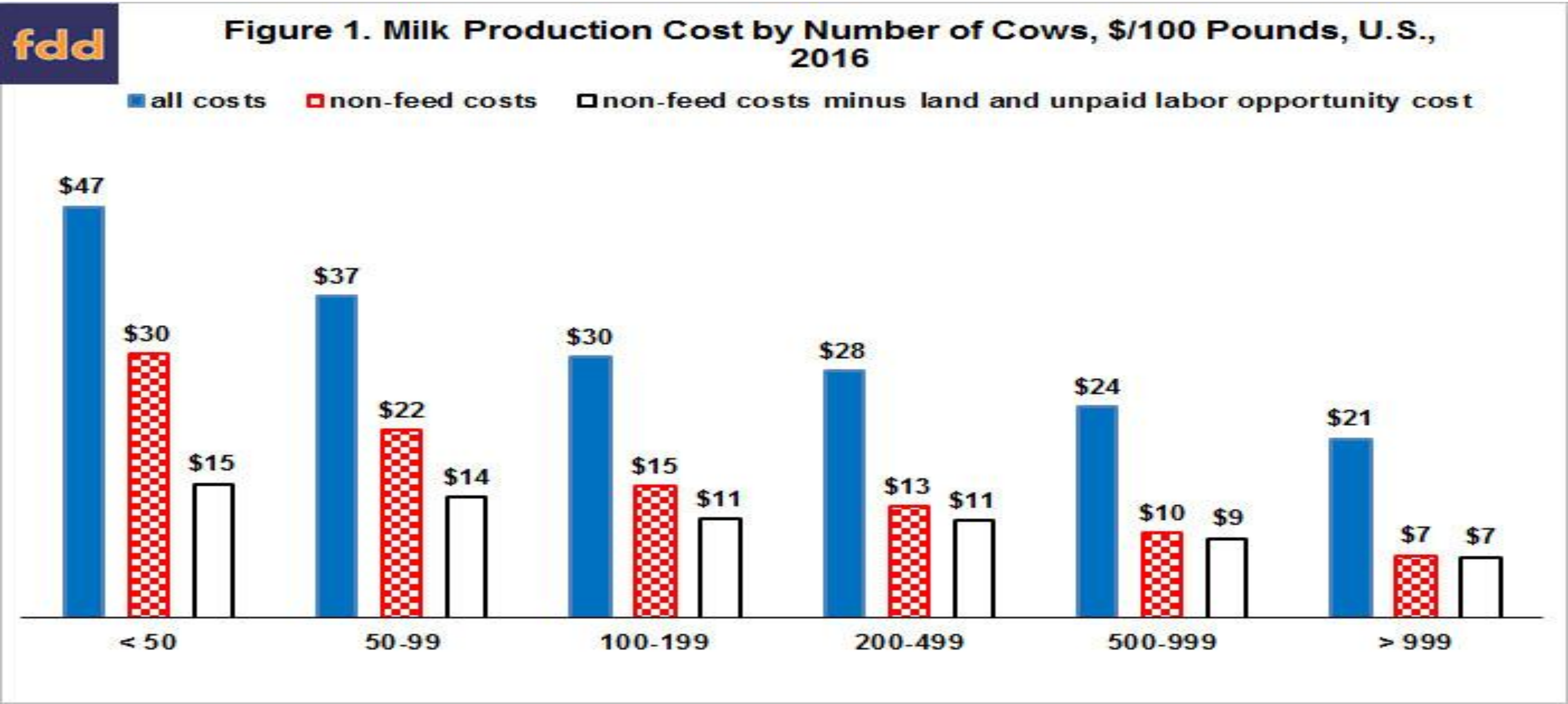
« Low Trading on the production quota exchange severely constrains production adjustments, making scale, allocative and technical inefficiencies more persistent » Larue, Singbo, Pouliot, Can. J. of Agric. Econ. 2017



We Have a Herd Size (quota) Problem

- Canada: East 65, West 126
- United States: California 1100, 3000 Wisconsin 80, 500 (farms with 1000+ cows make up 3% of all US dairy farms and have 44% of cows)
- Germany: South 30, 80, 108 North 131, 245, 700, 1200
- France: 38, 66, 84
- Denmark: 170, 350
- Australia: 274, 350
- New Zealand: 349, 1191
- China: Beijing 200, 1400 North 1340, 2400, 3900

Source : IFCN 2016

Cost-share program to stimulate productivity goes in the right direction

The Gate is Opened…

- The Comprehensive Economic and Trade Agreement (CETA) with the EU created an important precedent;
- Concessions under CP Trans-Pacific Partnership (3.25% of domestic production for dairy, 2.3% for eggs, 2.1% for chicken, 2% for turkey, 1.5% for hatching eggs);
- If NAFTA goes through, additional concesssions will have to be made;
- Regardless of NAFTA, SM supply chains must become more competitive. SM programs can be improved… or phased out;
- **Major policy and regulatory changes typically induce exits AND entries that increase productivity and reduce costs. Supply chains adjusts, they do not disappear**.

Beware of Propanganda and Fake News

« Our US neighbors call our supply management program a unfair state intervention, but the US farm policy distributes US$100 billions every year on its sector. This kind of spending facilitates the emergence of of mega farms geared toward exporting. »

translated from p.12 NouvAILES, dec. 2017

FACT: The USDA budget was US$153 billion for fiscal year 2017, but 71% of the budget was spent on nutrition assistance and 16% on farm and commodity programs, including US$180 million on the Dairy Margin Protection Program.
See https://www.obpa.usda.gov/budsum/fy17budsum.pdf

« Supply Management is Canadian Genius! »

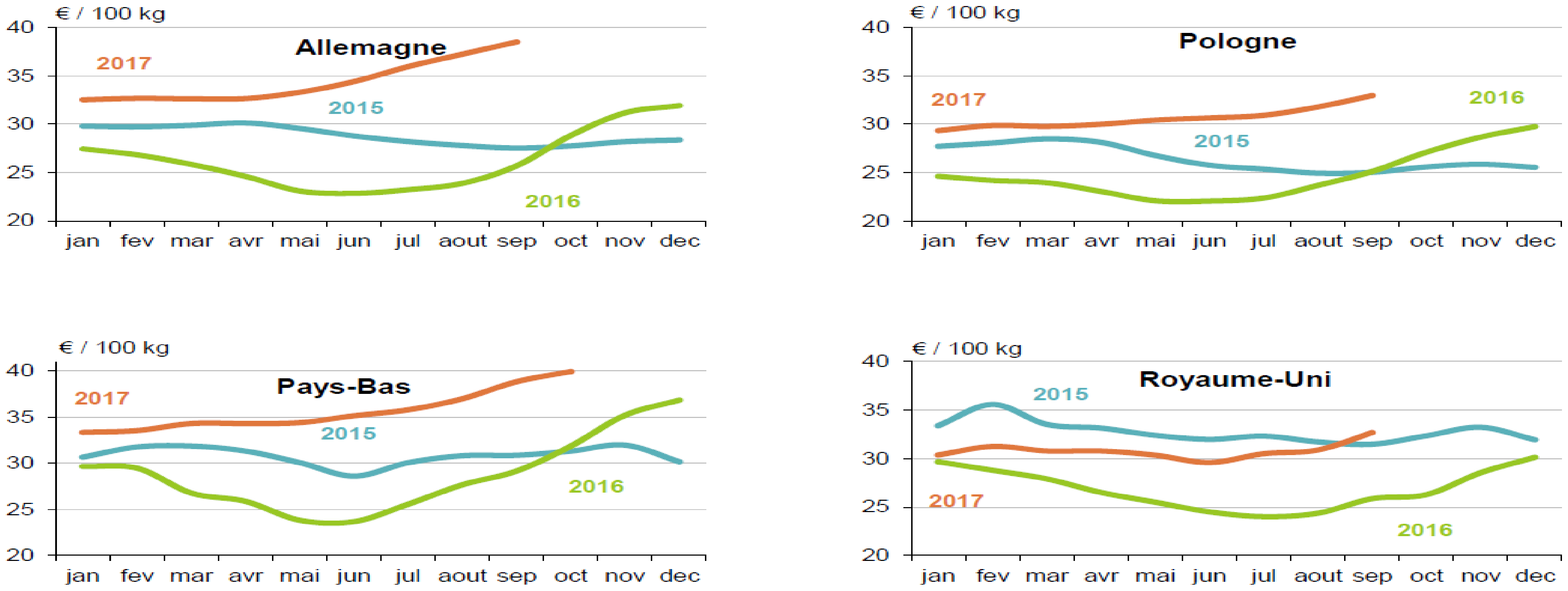
Egg Farmers of Canada website

…and like President Trump, stability is its hallmark!

Farm prices for milk in Germany, Poland, Holland and the United Kingdom

Cniel

Le prix du lait à la ferme



NB : les références de TB et de TP diffèrent d'un pays à l'autre , à l'exemple des Pays-Bas (4,4% MG et 3,47% en protéines) et de l'Allemagne (4,0% MG et 3,4% en protéines)

Cniel / ZMB

Average Farm Price for Milk in France

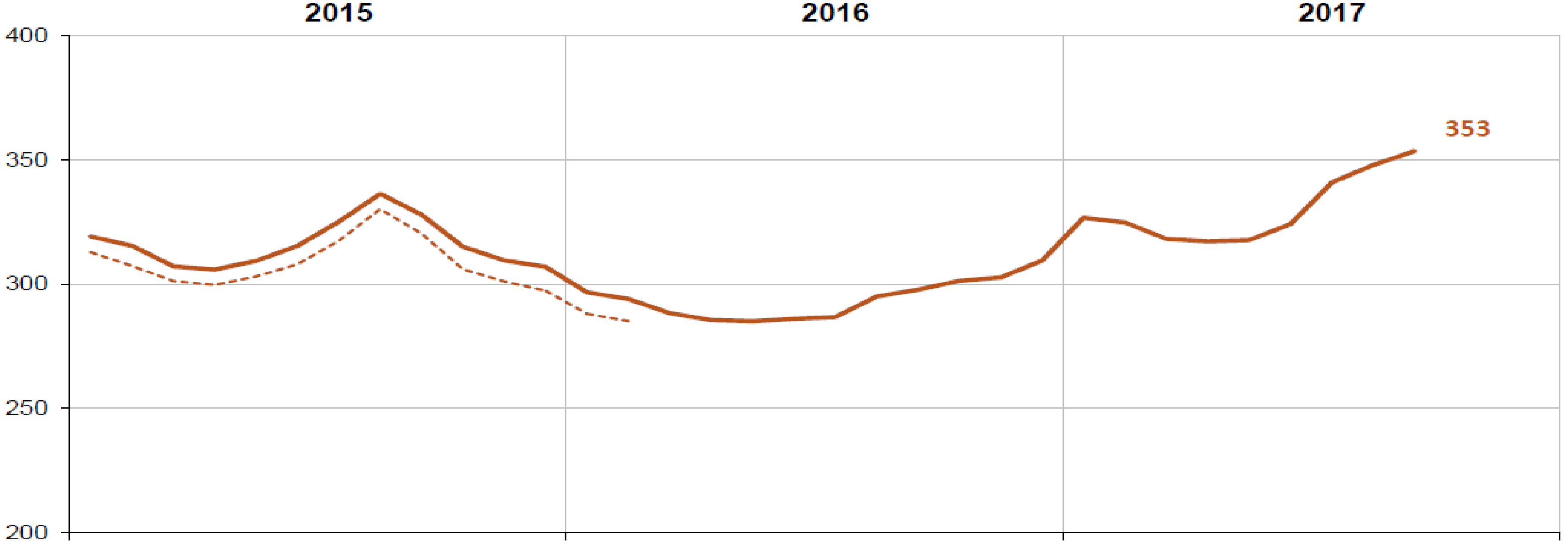
Cniel

Le prix du lait à la production en France

Situation en septembre 2017

Evolution mensuelle

€ / 1 000 litres, départ ferme, 38g MG 32g MP par litre



France (trait plein: EML révisée ; pointillés: Sondage mensuel jusqu'en mars 2015 puis EML avant révision)

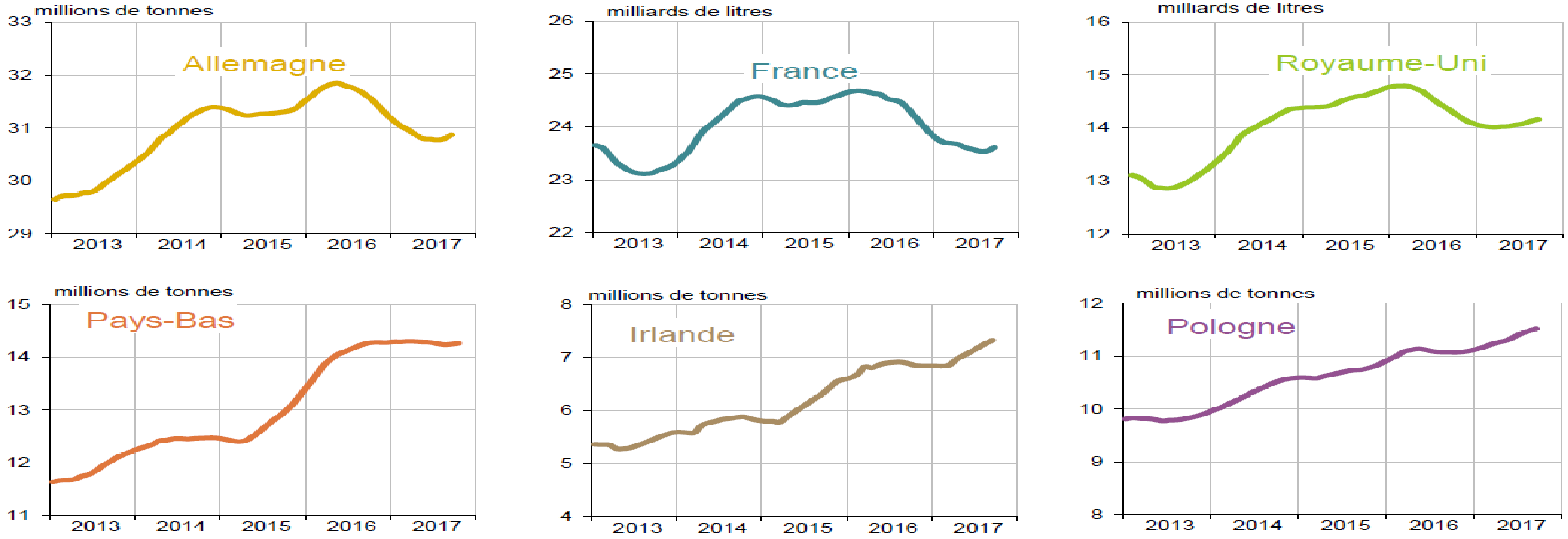
NB : Les statistiques de l'enquête laitière mensuelle sur le prix du lait de SSP/FAM viennent d'évoluer. Les prix des laiteries non répondantes à l'enquête sont dorénavant estimés à partir du prix des laiteries répondantes du même département, pour le même type de lait (lait non bio/lait bio ; lait pour production non AOP/lait pour production AOP dans les départements du Doubs, du Jura, de la Savoie et de la Haute-Savoie). Or, l'estimation se basait précédemment sur le prix moyen français toutes qualités confondues (bio, non bio, AOP et non AOP). Ce changement méthodologique entraîne une réévaluation des prix publiés par FranceAgriMer.

FranceAgriMer

Quantities of milk collected from dairy farms in EU countries

La collecte de lait de vache dans les principaux pays de l'UE

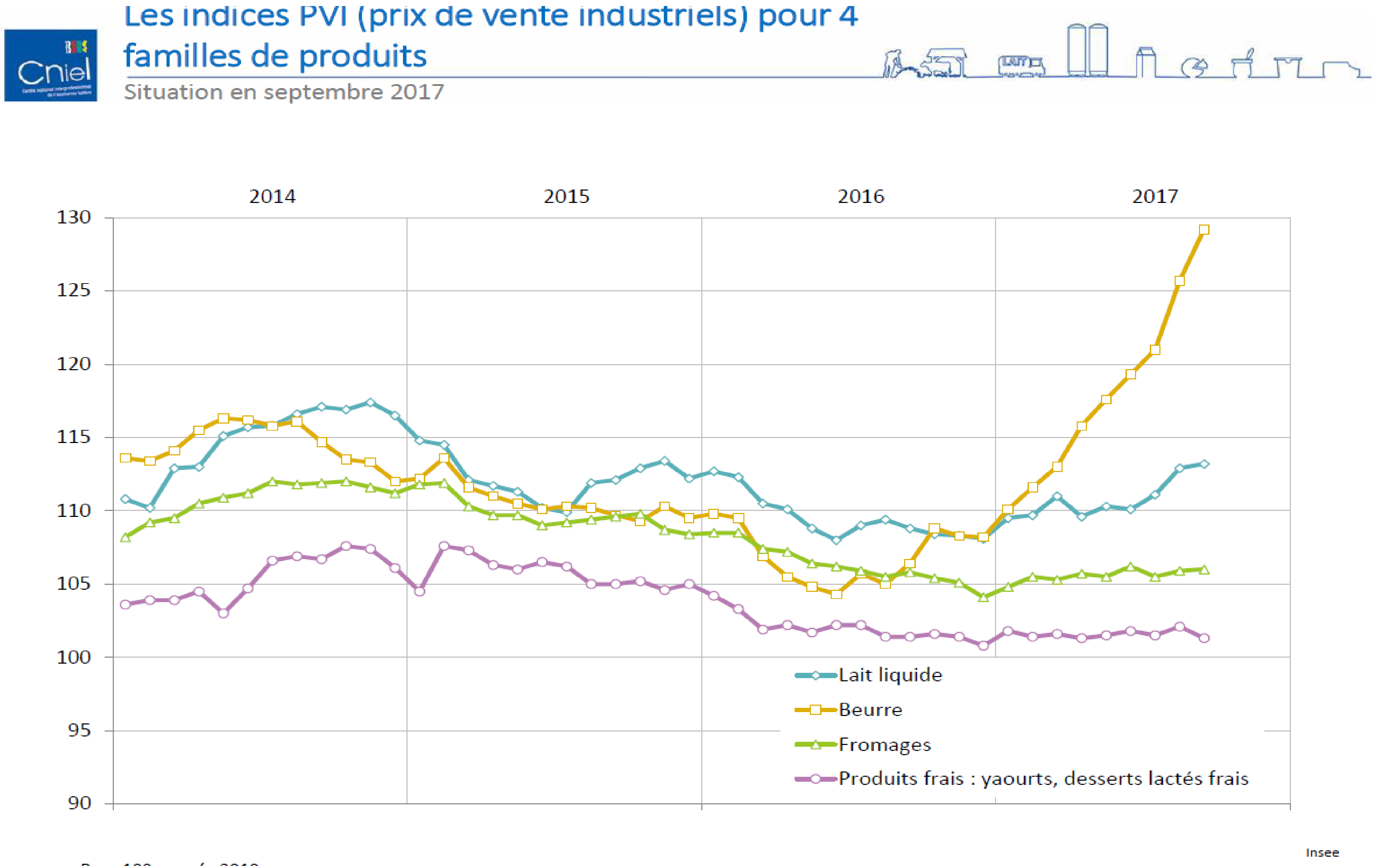
Evolution sur 12 mois glissants



Cniel / ZMB, FAM, DairyCo, CLAL, Eurostat

N.B. : février 2016 ramené à 28 jours

Industrial Price Indices for French Dairy Products: Cost-Push from Farm Price Mitigated



Retail Price Indices: Cost-Push from Farm Price Mitigated