Do Class I and II Differentials Still Matter?

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Discovering Prices and Managing Risk: Do We Need a Better Way?
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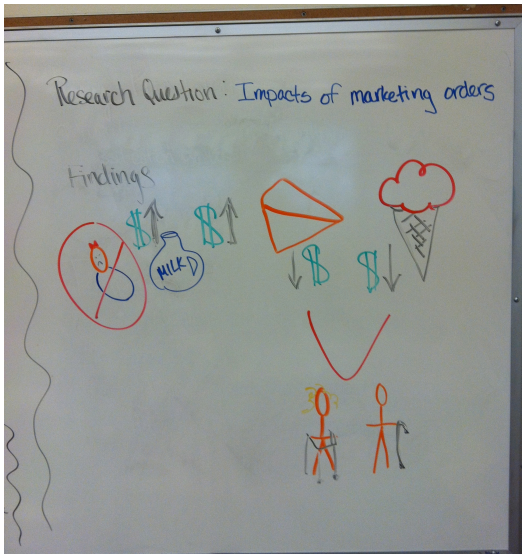
Do Orders Still Help Farmers?

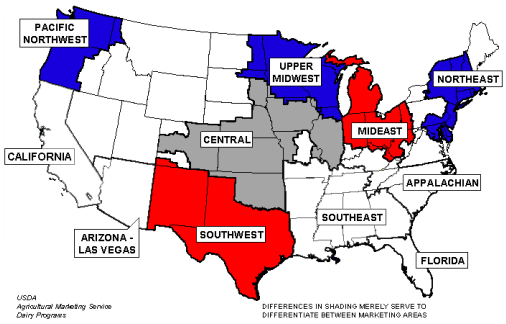
- "Do federal orders still help dairy farmers?"
  - In a 2004 Hoard's article Andy Novakovic asked this
- Less Class I use as a proportion of total milk
- Smaller Class I differentials relative to the Class III or IV price
- Order 135 voted out in 2004
- Criticisms of "price discovery" and "price setting" under Orders

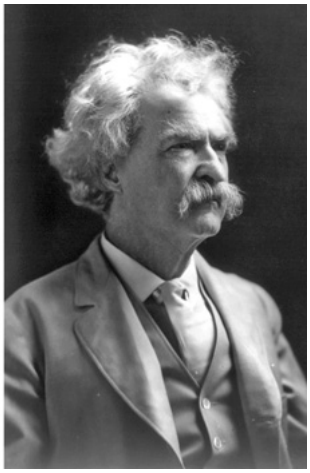
Impacts of Orders?



Mark Twain and FMMOS

- "The reports of my death are greatly exaggerated"





Orders' Demise?

- Seems premature at this point
- But many seem to agree that they will go away at some point
  - We've been saying "within the next 10 years" for the last 10 years?
- IDFA has proposed phasing out Class I differentials over 5 years

Objectives

- Examine the dynamic market impact of immediate or phased elimination of Class I and II differentials

Examine impacts on:

- Prices (class, All-milk)
- Cumulative revenues for producers, fluid milk processors and cheese manufacturers
- Net exports of cheese
- Government expenditures

Compare 3 Scenarios

- Baseline (no changes to current policy)
- Immediate elimination of Class I and II differentials in July 2013
- Phased elimination of Class I and II differentials over 4 years beginning in July 2013

Other Assumptions

- Maintain Class III and IV price formulas and minimum pricing
  - Not assuming "competitive pay price"
  - Still using the "higher of" for Class I in the absence of differentials
- Not eliminating orders per se
  - Phasing out differentials only
  - Impacts of Order elimination are likely to be much broader

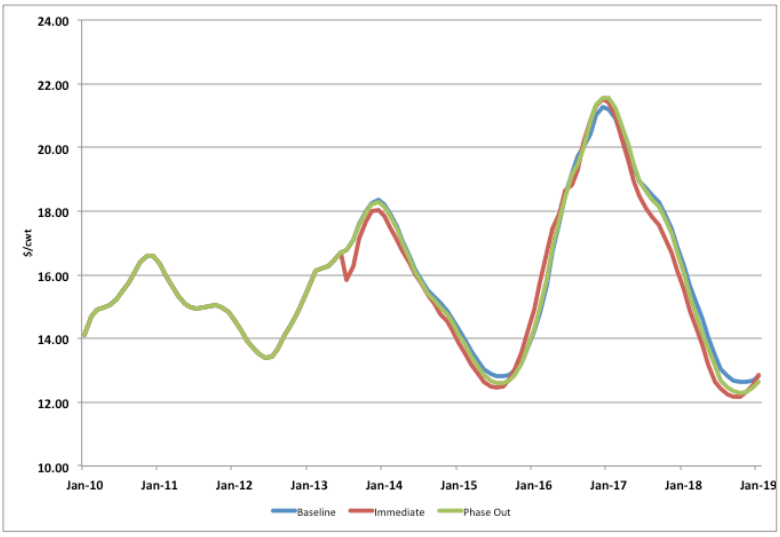
Other Caveats

- Assumes growth in dairy product demands
  - Demand curve shifts (more growth for cheese than fluid milk)
- Assumes no major shocks
  - A more complete analysis would account for these stochastic effects
- Assumes demands for fluid milk and cheese are both inelastic
- Not looking specifically at regional impacts

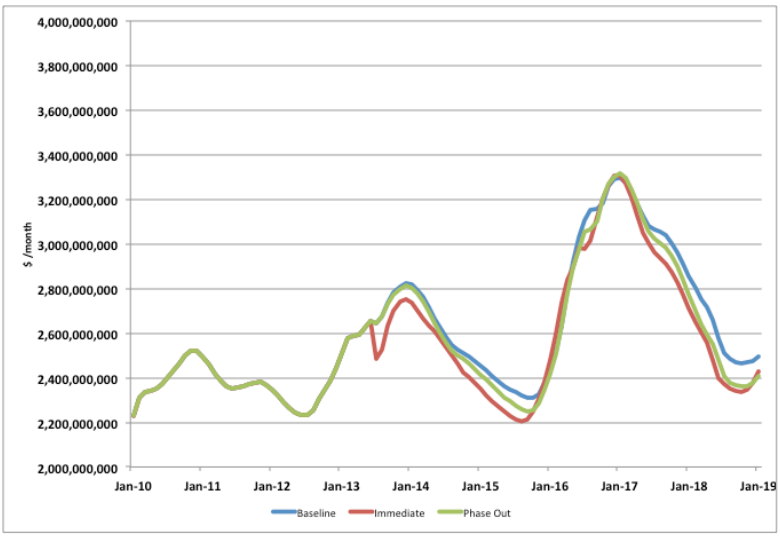
Consider this…

- Food for thought
- Rather than the definitive assessment

All Milk Price



Producer Revenues

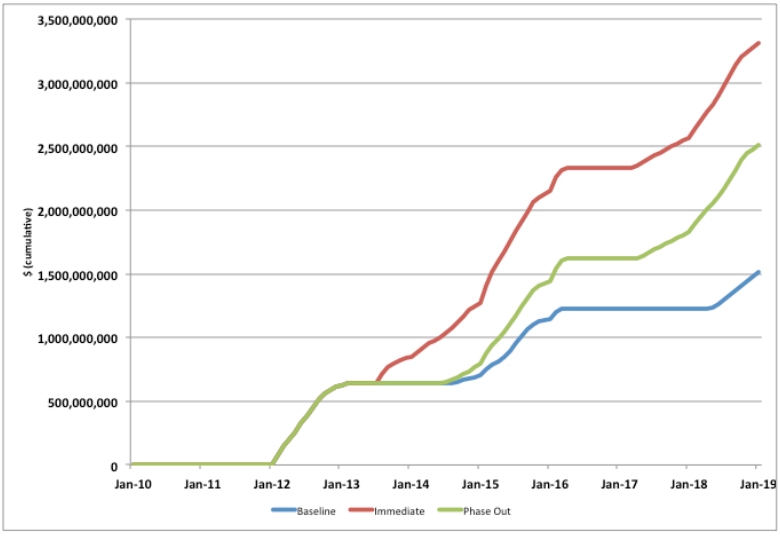


Summary Table of Impacts

Variable	Units	Baseline	Immediate	Phase Out
All Milk Price	$/cwt	16.22	15.95	16.13
Average Deviation After Program	$/cwt	2.13	2.16	2.22
Cumulative Producer Revenues	$ bil	180.3	174.9	177.5

Eliminating differentials reduces the All-milk price, slightly increases price variation and lowers revenues

Government Expenditures



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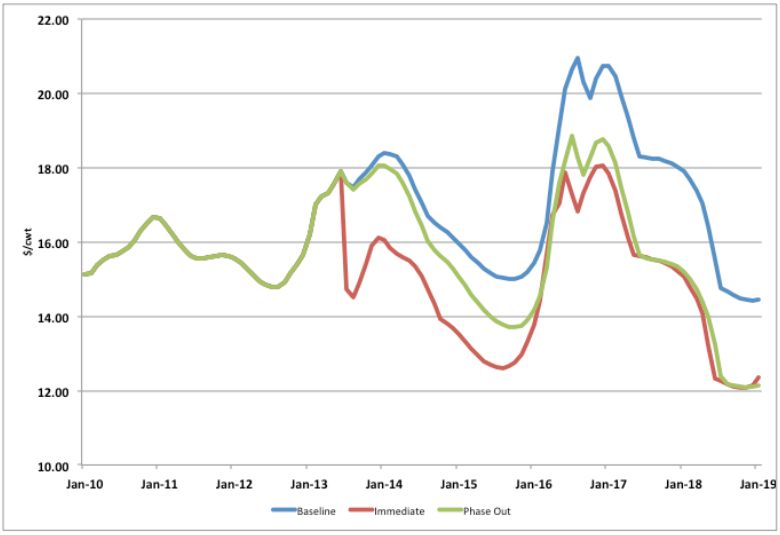
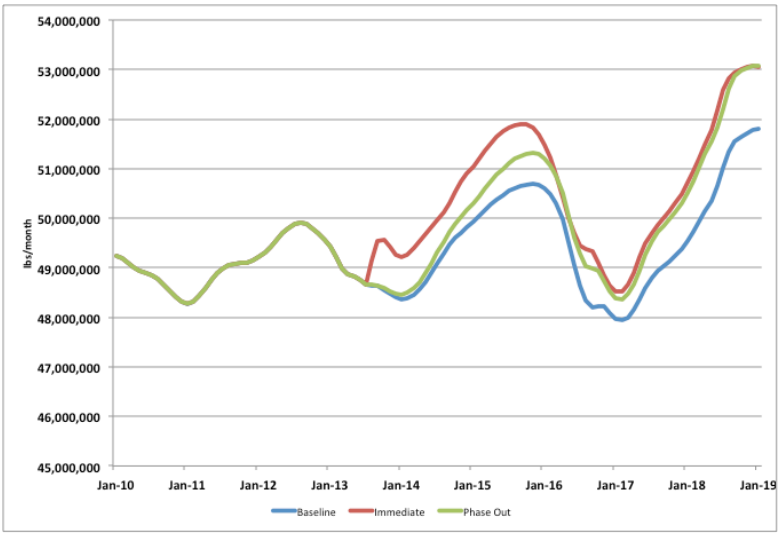
Government Expenditures 2012-18	**$ bil**	**1.51**	**3.31**	**2.51**

Eliminating differentials has potential to increase government expenditures under current programs due to lower average prices, especially during price troughs

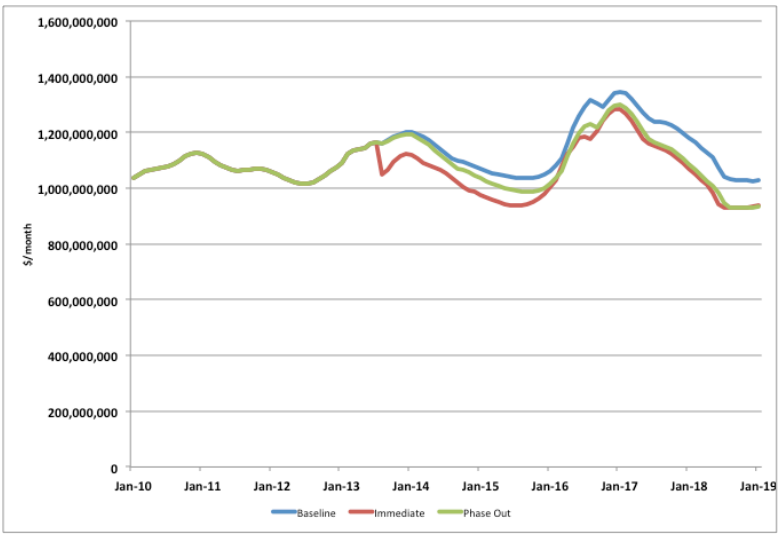
Class I Price



Fluid Milk Sales



Fluid Milk (Wholesale) Revenues



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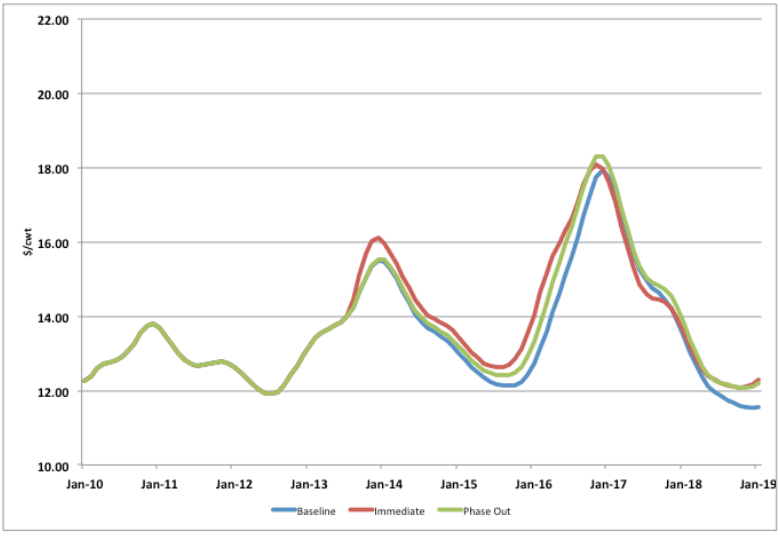
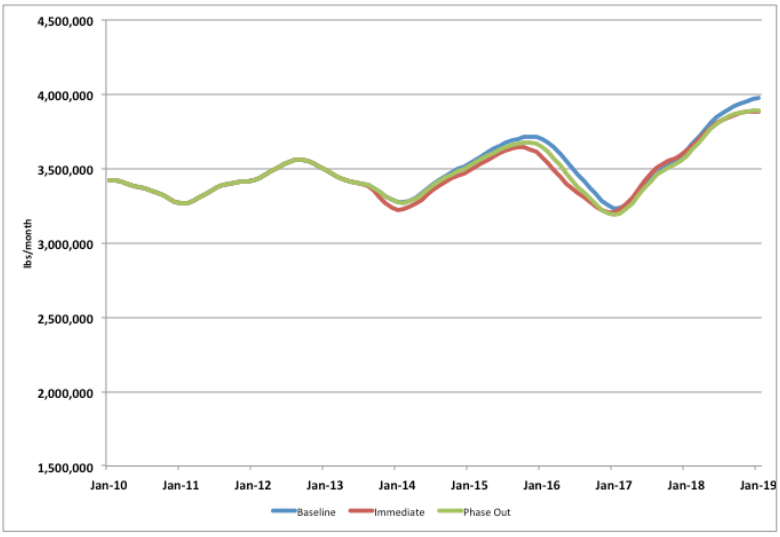
Class I Price	**$/cwt**	**17.26**	**14.75**	**15.68**
Cumulative Fluid Revenues	**$ bil**	**76.13**	**70.27**	**72.55**

Eliminating differentials decreases Class I prices, increases fluid milk sales and decreases fluid milk revenues (due to lowering price for an inelastic product)

Class III Price



Cheese Sales



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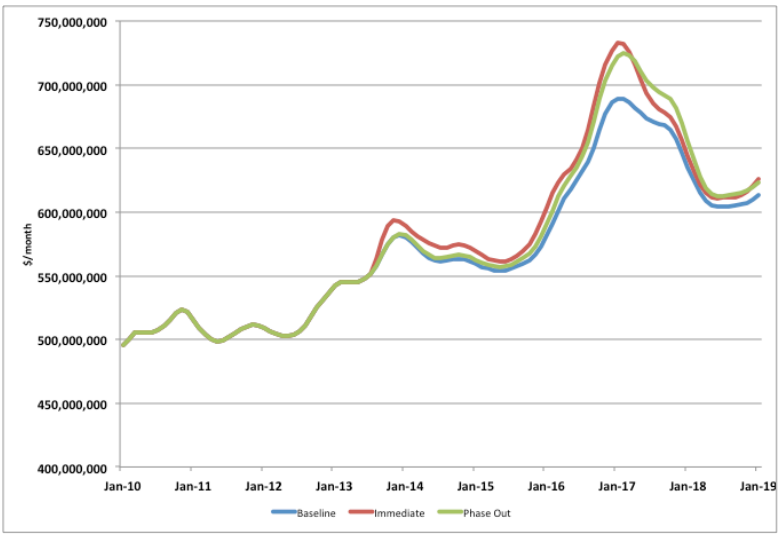

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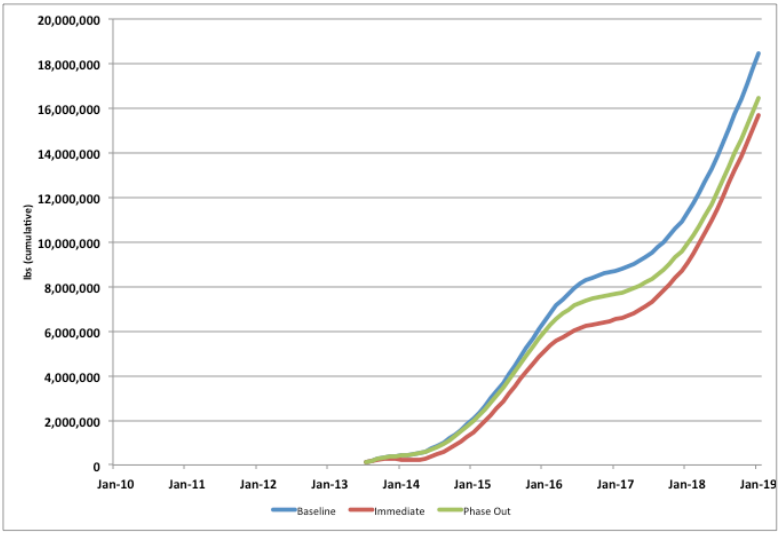
Class III Price	**$/cwt**	**13.96**	**14.38**	**14.27**
Cumulative Cheese Revenues	**$ bil**	**39.93**	**40.91**	**40.68**

Eliminating differentials increases Class III prices, decreases cheese sales and increases cheese revenues (due to raising price for an inelastic product)

Cumulative Net Exports Cheese



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Class I Price	$/cwt	17.26	14.75	15.68
Cumulative Fluid Revenues	$ bil	76.13	70.27	72.55
Class II Price	$/cwt	14.49	14.08	14.22
Ice Cream Revenues	$ mil/mo	184.44	185.12	184.91
Class III Price	$/cwt	13.96	14.38	14.27
Cumulative Cheese Revenues	$ bil	39.93	40.91	40.68
Net Exports American Cheese	**bil lbs**	**1.85**	**1.57**	**1.65**

Eliminating differentials decreases cheese exports due to higher prices

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Cumulative Cheese Revenues	$ bil	39.93	40.91	40.68
Net Exports American Cheese	bil lbs	1.85	1.57	1.65

Eliminating differentials decreases Class II prices and increases ice cream revenues

Summary Table of Impacts

	Difference		% Change	
Variable	Immediate	Phase Out	Immediate	Phase Out
All Milk Price	-0.27	-0.09	-1.7%	-0.6%
Average Deviation After Program	0.03	0.09	1.4%	4.2%
Cumulative Producer Revenues	-5.33	-2.79	-3.0%	-1.5%
Government Expenditures 2012-18	1.79	1.00	118.6%	65.9%
Class I Price	-2.50	-1.58	-14.5%	-9.2%
Cumulative Fluid Revenues	-5.86	-3.57	-7.7%	-4.7%
Class II Price	-0.42	-0.28	-2.9%	-1.9%
Ice Cream Revenues	0.68	0.46	0.4%	0.3%
Class III Price	0.42	0.31	3.0%	2.2%
Cumulative Cheese Revenues	0.98	0.75	2.5%	1.9%
Net Exports American Cheese	-0.28	-0.20	-15.1%	-11.0%

Key Changes Without Differentials

- Reductions in All-milk price ($0.09-0.27/cwt)
- Reductions in producer revenues ($2.8-$5.3 bil)
- Reductions in Class I price ($1.58-2.50/cwt)
- Reductions in fluid milk revenues (4.7-7.7%)
- Reductions in Class II Price ($0.28-$0.42)
- Small increase in ice cream revenues (0.3-0.4%)
- Increase in Class III price ($0.31-$0.42/cwt)
- Decrease in cheese sales (0.6 – 0.9%)
- Increase in cheese revenues (1.9 – 2.5%)
- Decrease in cheese exports (11-15%)

Concluding Comments

- Do Class I and II differentials still matter?
- Removing them has some impacts that at least some folks would consider important and of a sufficiently large magnitude
- Do orders still support farmers?
- Yes, but the impact on producer revenues is smaller now (1.5-3.0%) than it would have been in the past