THE ECONOMIC IMPORTANCE OF THE CALIFORNIA DAIRY QUOTA PROGRAM

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An Invaluable Asset to the Dairy Farmer and the State

Prepared for California Dairies, Inc., Dairy Farmers of America, Inc., and Land O' Lakes, Inc.

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My name is Lon Hatamiya. I am the President and CEO of The Hatamiya Group, an economics and strategic advisory consulting firm located in Davis, California. I was retained by California Dairies, Inc., Dairy Farmers of America, Inc., and Land O' Lakes, Inc. ("Cooperatives") to provide an independent and objective economic analysis of the dairy industry to the state of California and to examine the economic value of California's dairy quota program.

I. Introduction – Overview of the California Economy, the California Agricultural Economy, and the Dairy Industry's Important Contribution to the Economy

The dairy industry in California is an important and vital component to the economy of the state of California. At the end of 2014, California's economy had grown to over $2.3 trillion in Gross Domestic Product ("GDP").[1] If California were a country, it would have the eighth-largest economy in the world,[2] slightly behind Brazil and strongly ahead of Italy, India, Russia and Canada. Moreover, the agricultural industry is a major component of the California economy providing over $56.2 billion in economic output in 2014.[3] This multi-billion dollar industry is arguably the backbone of California's globally-aligned economy, with a long-established international network of producers, consumers, and service providers.

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[1] http://www.bea.gov/newsreleases/regional/gdp_state/gsp_newsrelease.htm, downloaded September 7, 2015.

[2] World Development Indicators, *World Bank*, April 14, 2015.

[3] http://www.ers.usda.gov/data-products/state-fact-sheets.aspx, downloaded September 7, 2015.

More specifically, dairy products are the number one agricultural commodity in California with over $9.3 billion in farm receipts in 2014, making up 17.3% of all California farm receipts.[4] The state of California is also the largest dairy producing state in the country with over 20% of national production. In addition, California is the leading exporter of dairy products with nearly $1.3 billion in 2013. By any measure, the dairy industry is an important contributor to the overall and agricultural economy of the state of California.

Through my extensive professional experience and expertise, I believe I bring a unique perspective to this analysis. From 1993 to 1997, I served as Administrator of the Agricultural Marketing Service of the United States Department of Agriculture ("USDA"), where I oversaw over 50 federal programs, including the Federal Milk Marketing Order ("FMMO") system. I also served as Administrator of the Foreign Agricultural Service at USDA from 1997-1999, and then returned to my native California to serve as Secretary of the Technology, Trade and Commerce Agency from 1999-2003, where I oversaw the promotion of statewide economic development, job creation, and business retention.

Prior to my service at USDA, I practiced law and worked with my three-generation family farm in Yuba and Butte counties. Since 2003, I have been a consulting economist, analyzing local, regional, state, national and international economic impacts, trends, and economic development opportunities on various industries including agriculture, energy, high technology, real estate, retail, professional sports, transportation, tourism, and higher education. I have also extensive expertise in determining economic valuations of various industries from agriculture to biotechnology, and alternative energy to medical device companies, utilizing appropriate valuation methodologies. I have testified over a hundred times before the World Trade Organization, U.S. Congress, California State Legislature, and federal, state and local courts, boards, and commissions on a wide variety of relevant issues.

[4] Ibid.

In addition, as an academic, I previously served as Executive-in-Residence and Adjunct Professor at the UC Davis Graduate School of Management, and was also selected as a Senior Fellow at the UCLA Luskin School of Public Affairs. I also currently serve as a part-time lecturer at the International Masters in Law Program at the UC Davis School of Law, and as a Senior Fellow at the University of Denver International Career Advancement Program. I received my B.A. in Economics from Harvard University; my M.B.A. from the Anderson Graduate School of Management at UCLA; and my J.D. from the UCLA School of Law. Please also find attached my full CV for your reference.

Throughout my professional career, I have acquired and maintained an international, national, regional as well as a statewide and local perspective with regard to agriculture and its pertinent economic impact upon all communities. For this analysis, I have relied upon that experience to determine the economic importance of the dairy industry to California, and most specifically, the unique economic value of dairy quota.

II. Overview of the California Dairy Quota Program

The state of California has operated a Dairy Quota Program since adopting a Milk Pooling Plan in 1969. The *Gonsalves Milk Pooling Act*, California Food and Agricultural Code Section 62700, et seq., authorizes the Secretary of the California Department of Food and Agriculture ("CDFA") to operate a statewide pooling system under specified guidelines. These statutes provide for the formulation and adoption of Milk Pooling Plans for Market Milk (Pool Plan). Under the California Pooling Plan for Market Milk, the producer is paid based upon his or her allocated quota, base, and overbase at prices that reflect the pool-wide usage of all classes. The monthly quota and base amounts are computed for each producer to the extent these amounts are produced. The maximum monthly quota amount is determined by the current quota allocation, and the

maximum monthly base is determined by the difference between production base and quota. Any production that exceeds these two figures constitutes overbase production.[5]

Revenue from processors is distributed to dairy farmers via quota, base, and overbase prices. Since the CDFA Milk Pooling Branch's inception in 1969 until 1993, the quota price was primarily impacted by Class 1, 2, and 3 farm prices, while the overbase price was primarily impacted by the Class 4a and 4b farm prices. This was changed by statute enacted in 1993 and made permanent in 1994. Beginning in January 1994, a fixed differential was established so that the quota price is always $1.70 per hundredweight greater than the base and overbase prices. Historically from 1969 through 1993, the difference between the announced quota and overbase farm prices ranged from $1.06 to $2.26 per hundredweight on an annual average basis. Currently, revenue above that needed to maintain the $1.70 differential is shared equally among quota, base, and overbase production. The announced quota price is adjusted based on farm location by regional quota adjusters (RQA's). Prices paid to an individual producer depends upon his or her farm location and blend of quota, base, and overbase holdings. For computational purposes, the whole $1.70 is assigned to the solids-not-fat ("SNF") price. Thus, the announced quota SNF price is set at $0.195 per pound above the base and overbase SNF prices. Because of RQA's, the actual quota SNF price received by individual farmers may be adjusted downward by up to $0.27 per hundredweight based on farm location. The fat prices for quota, base, and overbase are identical.[6] Periodically, CDFA has issued additional quota to producers from an original allocation, but none since 1991. CDFA has issued 2,215,978 pounds of quota SNF on a daily basis (about 66.2 million pounds of SNF monthly). CDFA also considers milk pool quota as a tradeable asset that is transferred between California Grade A dairy producers. Transfers occur monthly and must be processed by the CDFA Milk Pooling Branch as highlighted below:

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[5] "The California Dairy Industry – A Historical Review," California Department of Food and Agriculture, July, 2008.

[6] "The California Dairy Industry – A Historical Review," California Department of Food and Agriculture, July, 2008.

Table 1: CDFA Milk Pooling Branch
SUMMARY OF TRANSFERS, 2015
SALES BASED ON QUOTA SOLIDS-NOT-FAT

Month	Sellers	Buyers	Sales at 100%	Avg. Sales Price w/o Cows	Avg. Sales Price with Cows	Total Production Base Fat Transferred	Total Quota Fat Transferred	Total Production Base SNF Transferred	Total Quota SNF Transferred
January	1	4	1	$525	0	810.68	823.50	1,971.91	2006.72
February	0	0	0	0	0	-	-	-	-
March	1	1	1	$525	0	248.68	219.84	662.32	563.43
April	2	3	2	$525	0	380.21	362.56	939.17	913.76
May	1	1	1	$525	0	68.03	61.29	170.28	153.41
June	1	1	1	$525	0	102.43	92.29	264.56	238.36
July	1	1	1	0	$525	1,240.72	1,229.05	2,906.48	2,882.14
August	2	2	1	$528	0	272.11	267.23	686.57	674.78
September	5	5	4	$528	0	2,066.51	2,093.95	5,252,29	5,271.48

Based upon the current average price of $525 per pound of quota SNF (as noted in the table above) multiplied by the 2,215,978 pounds of quota SNF issued by CDFA, results in the total aggregate quota value owned by California dairy producers of nearly $1.164 billion. This is a significant economic asset with enormous value to both dairy producers and communities across California.

III. Examination and Quantification of the Economic Value of Quota

As described above, the state of California maintains a premium payment on the milk produced and covered by quota which plays an important and vital role in the California dairy industry. Quota payments are an integral part of revenues to many California dairy farmers. In fact, paramount to any consideration of a California federal milk marketing order (FMMO) was the assurance that the quota program would not in any way be diminished or affected. Congress

recognized this and in the 2014 Farm Bill language dealing with the promulgation of a FMMO in California directed that the marketing order provisions allow for the continuation of the quota program in California. The 2014 Farm Bill (section 1410(d)) references the 1996 Farm Bill (section 143(2)),

> "Upon the petition and approval of California dairy producers in the manner provided in section 8c of the Agricultural Adjustment Act (7 U.S.C. 608c), reenacted with amendments by the Agricultural Marketing Agreement Act of 1937, the Secretary shall designate the State of California as a separate Federal milk marketing order. The order covering California shall have the right to reblend and distribute order receipts to recognize quota value." (Emphasis added)

A. In order to best "Recognize Quota Value," the full economic value must be determined and maintained

"Economic Value" is defined in several ways, but is commonly recognized as the value of an asset calculated according to its ability to produce income in the future. Value is linked to price through the mechanism of exchange. When one observes an exchange, two important value functions are revealed: those of the buyer and seller. Just as the buyer reveals what he is willing to pay for a certain amount of a good, so too does the seller reveal what it costs him to give up the good. This definition describes California's dairy quota most appropriately as it is a marketable and transferable asset that can be bought, sold, and results in an assured source of cash flow for the owner of that quota.

As a result, in order to best determine the economic value of dairy quota, we must examine the common practices in which quota is utilized, traded, and accounted for in the market place. To best achieve this I surveyed a range of California accounting firms that specialize in

dairies[7]; a range of financial institutions that are major dairy lenders;[8] and a range of dairy farmers of varying sizes and operations from across the state.[9]

1. Characterization of Dairy Quota Holdings by Accounting Firms that service dairies across California

a. Quota value is universally accounted at the cost the dairy paid for it and booked at its historical value. Therefore, all accounting firms carry quota value on their dairy clients' balance sheets as a "Cost Basis".

b. Quota value is recognized as an investment and transferable intangible asset.

c. CPA's characterize quota value under current assets, intangible assets, and/or long-term assets.

d. Most importantly, should the California Dairy Quota Program be eliminated, massive write-offs of losses would be taken. For example, several CPA's noted that many of their client's write-offs would be in the millions of dollars for individual dairies.

2. Characterization of Dairy Quota Holdings by Lending Financial Institutions in California

a. In making lending decisions and reviewing debt-to-asset and other relevant ratios, all financial institutions place a value on quota ownership and consider it an asset, which is unencumbered and marketable.

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[7] Including Adair & Evans; Genske, Mulder & Co., LLP; M. Green and Company LLP; and Moss Adams, LLP.
[8] Including Citizens Business Bank, Farm Credit West, Five Star Bank, Rabobank, and Wells Fargo.
[9] Including cooperative member dairies of California Dairies, Inc., Dairy Farmers of America, Inc. and Land O' Lakes, Inc.

1. Each bank (and even within each bank) utilizes different formulas characterizing "quota ownership value."

2. For Uniform Commercial Code ("UCC") reporting requirements, financial institutions refer to quota ownership as either a tangible or intangible asset, placing great emphasis on:

    i. Liquidity quota ownership provides;
    ii. Steady source of assured cash flow and revenues/income;
    iii. Quota ownership as controllable asset;
    iv. Value of quota on dairy's balance sheet affects a bank's perceived risk. The level of quota ownership either lessens or increases the dairy's borrowing leverage – e.g. the more quota ownership, the better the leverage;
    v. When considered a tangible asset, quota ownership is also treated as a form of collateral with an abundance of caution and reported as chattel (any article of tangible property other than land, buildings, and other things annexed to land) under the UCC (not all banks take this approach);
    vi. Other banks do not consider quota ownership as collateral, but it is considered something very close ("the next best thing");

b. Financial institutions do not lend just on quota ownership value, but recognize the value of regular cash flows as a factor in lending decisions and deem quota ownership as "always a benefit, useful asset tool, if deployed correctly on a case-by-case basis".

c. Moreover, the financial institutions noted that should the California Dairy Quota Program be eliminated or eroded, a major financial asset would be destroyed leaving dairies one less invaluable tool (an assured source of revenue) to obtain necessary financing.

3. Characterization of Dairy Quota Holdings by Dairy Farmers in California

a. Dairy farmers of all sizes across California consider quota ownership an invaluable liquid asset that is essential to their monthly cash flow and to meet the increasing cost of operations.

b. During difficult and challenging economic periods, quota ownership and the assured source of cash flow have helped dairy farmers meet the increasing pressures of the higher cost of production, e.g. feed, labor, energy, water. This is especially relevant, but not exclusive, to smaller dairies with quota ownership.

c. All dairy farmers that own quota have bought and sold quota over the years and consider it a solid financial investment because, unlike other assets, "it does not require maintenance or a veterinarian over time." Its transferability, marketabililty, and long-term assured value has been a hallmark of the dairy quota's existence.

d. Buying additional dairy quota is considered a better return on investment for many dairy farmers who are being priced out of the increasingly exorbitant land prices across the state.

e. For many California dairy farmers, quota ownership has allowed them to continue in the dairy business, retain their family's dairy "culture", and survive in an increasingly competitive global marketplace.

f. Lastly, should the California Dairy Quota Program be eliminated, diminished, or changed from its current status, many dairy farmers would suffer irreparable damage with massive write-offs of their significant quota investment.

B. Make-up of Quota Ownership Across the State

Quota ownership has changed over time. As quota has been bought, sold and traded over the years, and with increasing milk production, the percentage of California dairies owning quota has shifted.

Table 2: Percent of California Dairy Farms by Quota Ownership[10]
(% of quota relative to milk production)

Percent Ownership	1995	2000	2005	2010	2015
0%	17%	28%	35%	37%	42%
1% to 20%	23%	23%	22%	21%	20%
21% to 40%	19%	17%	15%	15%	13%
41% to 60%	16%	14%	11%	11%	9%
61% to 80%	13%	11%	9%	8%	7%
Over 80%	11%	7%	8%	8%	9%
Total % with Ownership	83%	72%	65%	63%	58%
Number of Dairies	2,161	2,003	1,828	1,566	1,434

[10] Data provided by California Department of Food and Agriculture, Dairy Marketing Branch.

Number of Dairies with Quota	1,794	1,442	1,188	987	832

Currently, 58% of all California dairy farms own some percentage of quota (approximately 832 dairies).

For purposes of my foregoing data analysis, I also reviewed the current (as of January, 2015) geographical distribution of quota ownership across California as noted in the Table 3 below. I was also able to approximately calculate the percentage of a county's milk production covered by quota by utilizing the geographical distribution of quota ownership and the CDFA reported monthly milk production data.[11]

Table 3: Dairy Quota by County, as of January 2015[12]
(Pounds of Quota Solids-Not-Fat)

County	Quota SNF	Percent of Total Quota Allocated
Tulare	417,068.87	18.82%
Merced – Monterey	339,155.08	15.30%
Stanislaus	309,732.61	13.98%
Kern – Los Angeles – Santa Barbara	232,899.24	10.51%
San Joaquin	155,208.96	7.00%
Riverside	145,495.15	6.57%
Kings	143,075.64	6.46%
Fresno	120,660.25	5.45%
San Bernardino	113,675.33	5.13%

[11] The percentage of a county's milk production covered by quota was approximately calculated by multiplying the daily quota holdings (qSNF) by county by the days in the month (31 for January 2015) to get a monthly total. I then divided the monthly qSNF County total by the total pounds of SNF produced in the County for the month to determine the overall percentage of quota.

[12] Most recent available data provided by California Department of Food and Agriculture, Dairy Marketing Branch.

Madera	75,905.25	3.45%
Mendocino – Sonoma	69,460.51	3.14%
Sacramento	27,145.08	1.23%
Marin	21,238.58	0.95%
Glenn	18,327.87	0.83%
Del Norte – Humboldt	8,722.98	0.39%
Yolo – Yuba	8,584.25	0.39%
San Diego	7,610.14	0.34%
Tehama	1,458.77	0.06%
San Luis Obispo	557.70	0.03%
TOTAL	**2,215,977.26**	**100.00%**

The top ten quota holding counties/areas make up over 90% of all quota ownership. The largest quota ownership by volume is in Tulare, Merced-Monterey, Stanislaus, and Kern - Los Angeles – Santa Barbara Counties. However, the highest concentration of milk production covered by quota is in many smaller producing counties such as San Diego with nearly 74%, Marin with over 63%, Riverside with over 62%, and Sonoma with nearly 61%. This compares with Tulare County at 14.8%, Stanislaus County at 30.1%, San Joaquin County at nearly 27%, and Kings County at just over 13%.

C. Economic Value of Quota to the Dairy Farmer and Dairy Industry

With the current (qSNF as of January 2015) distribution of dairy quota across California, I have calculated the total economic value of quota by county/area and the entire state as follows:

Table 4: Total Dairy Quota Value by County and State, 2015
(calculated at the current average market rate of $525/pound)

County	Quota SNF	Percent of Total	Current Total Quota Value
Tulare	417,068.87	18.82%	$218,985,531.75
Merced – Monterey	339,155.08	15.30%	$178,056,417.00
Stanislaus	309,732.61	13.98%	$162,609,620.25
Kern – Los Angeles – Santa Barbara	232,899.24	10.51%	$122,272,101.00
San Joaquin	155,208.96	7.00%	$81,484,704.00
Riverside	145,495.15	6.57%	$76,384,953.75
Kings	143,075.64	6.46%	$75,114,711.00
Fresno	120,660.25	5.45%	$63,346,631.25
San Bernardino	113,675.33	5.13%	$59,679,548.25
Madera	75,905.25	3.45%	$39,850,256.25
Mendocino – Sonoma	69,460.51	3.14%	$36,466,767.75
Sacramento	27,145.08	1.23%	$14,251,167.00
Marin	21,238.58	0.95%	$11,150,254.50
Glenn	18,327.87	0.83%	$9,622,131.75
Del Norte – Humboldt	8,722.98	0.39%	$4,579,564,50
Yolo – Yuba	8,584.25	0.39%	$4,506,731.25
San Diego	7,610.14	0.34%	$3,995,323.50
Tehama	1,458.77	0.06%	$765,854.25
San Luis Obispo	557.70	0.03%	$292,792.50
TOTAL	**2,215,977.26**	**100.00%**	**$1,163,388,061.50**

As noted before, at the current average market rate of $525 per pound, total economic value of quota owned is approximately $1.164 billion. By any measure, this is a substantial financial investment made by California dairy farmers. More specifically, dairy farmers from all corners of the state have an enormous investment and an invaluable asset at stake – from

nearly $220 million in Tulare County, $178 million in Merced and Monterey Counties, and over $162 million in Stanislaus County to over $36 million in Mendocino and Sonoma Counties, $11.1 million in Marin County, and nearly $4 million in San Diego County.

Additionally, utilizing statewide Quota Premiums less Regional Quota Adjusters ("RQA") per month as provided by the California Department of Food and Agriculture for 2014 (most recent calendar year available), I have further calculated the annual total quota payments per county/area as follows:

Table 5: Total Quota Payments per California County, 2014

County	Quota Premium	RQA	Total RQA	Total Quota Payment
Tulare	$28,800,240.88	$.031034	$4,724,253.45	$24,075,987.43
Merced-Monterey	$23,453,813.19	$.012644	$1,565,221.04	$21,888,592.14
Stanislaus	$21,416,349.34	$.012644	$1,429,434.58	$19,986,914.76
Kern-Los Angeles-SantaBarbara	$16,100,560.20	$.023563	$1,591,385.99	$14,509,174.21
San Joaquin	$10,723,493.95	$.012644	$716,298.66	$10,007,195.28
Riverside	$10,064,765.03	-	-	$10,064,765.03
Kings	$9,896,252.98	$.031034	$1,620,676.44	$8,275,576.55
Fresno	$8,349,006.00	$.031034	$1,366,768.12	$6,982,237.88
San Bernardino	$7,858,789.13	-	-	$7,858,789.13
Madera	$5,246,852.40	$.012644	$350,307.28	$4,896,545.11
Mendocino-Sonoma	$4,802,593.36	$.005747	$145,704.19	$4,656,889.17
Sacramento	$1,884,271.08	$.012644	$125,276.17	$1,758,994.91

Marin	$1,455,331.32	$.005747	$44,551.21	$1,410,780.11
Glenn	$1,266,904.21	$.012644	$84,584.22	$1,182,319.99
Del Norte-Humboldt	$603,579.52	$.005747	$18,297.80	$585,281.71
Yolo-Yuba	$592,856.02	$.012644	$39,616.83	$553,239.19
San Diego	$525,451.20	-	-	$525,451.20
Tehama	$91,915.66	$.012644	$6,732.31	$85,183.35
San Luis Obispo	$30,638.55	$.023563	$4,796.50	$25,842.06
TOTAL				**$139,329,759.23**

The total annual quota payments, or more appropriately – the Total Annual Return on Quota Investment to dairy farmers across California for 2014 – was over $139.3 million. These total annual returns on quota investments are significant across the state and from county to county, and are important in determining the total economic impact upon the state and local communities that dairy production and quota ownership exists across California.

IV. Examination of the Economic Impact of Changing the California Dairy Quota Program

A. Economic Impact that Quota has upon the State, Region, County, and Dairy Community

To better determine the total economic impact of the Dairy Quota Program upon the state of California and the various dairy-producing counties across the state, I have utilized a generally recognized economic impact analysis model. Economic Impact Analysis refers to any number of processes that trace how changes in spending, such as industry or government spending, business closures, new industrial or infrastructural developments, and/or natural disasters move through an economy. An impact study measures the cumulative effects of that spending on a defined geographic region.

Economic Impact Analysis can also provide information about the effects of policy and employment changes such as reports on job creation estimates related to the American Recovery and Reinvestment Act of 2009, to the effects of a local business' opening or closing, the impacts of job exportation to other countries, or the tax revenue associated to certain policy decisions made by local, state or federal governments. Typically, whenever the phrase the "estimated impact on the economy/community is that X jobs are created" is used, these are the results of an economic impact analysis report.

Identification and quantification of direct, indirect, and induced economic contributions of dairy quota payments was accomplished by analyzing the most recently available Dairy Quota Premium less Regional Quota Adjusters (from calendar year 2014)[13] and applying that data to the appropriate economic input-output model. The model utilized in this study is called Impact Analysis for Planning ("IMPLAN"). Economic input-output models like IMPLAN are the primary tool to measure the total economic impact of a policy or event—in this case the annual payment of dairy quota. The theory behind economic impact analysis is that the total economic impact of an existing entity within a geographic region is not merely limited to the number of employees the entity hires or lays off, the payroll associated with these employees, or the operational or capital expenditures it annually makes. The total economic impact also includes additional, multiplicative impacts. Additional impacts occur as the entity foregoes spending money on goods and services and as the wages of their employees find their way through the local and regional economy or conversely as an entity fails to spend and the impact that this lack of spending has upon the economy.

Input-output accounting describes commodity flows from producers to intermediate and final consumers. The total industry purchases of commodities, services, employment compensation, value added, and imports are equal to the value of the commodities

[13] Monthly totals from January, 2009 through July, 2015, were provided by the California Department of Food and Agriculture, Dairy Marketing Branch, 9/18/2015. However, for puposes of this analysis, I relied upon data from calendar year 2014.

produced. Purchases for final use (final demand) drive the IMPLAN model. Industries produce goods and services for final demand and purchase goods and services from other producers. These other producers, in turn, purchase goods and services. This buying of goods and services (indirect purchases) continues until leakages from the region (imports and value added) stop the cycle. Moreover, any direct expenditure associated with an entity will have "ripple" effects throughout the economy. In other words, each dollar of direct expenditure generates more than one dollar in the economy, thus the resulting multiplier effect.

For purposes of this analysis, the direct impacts are the direct result of dairy expenditures as a result of dairy quota payments. The indirect impacts are generated from expenditures of the persons who benefit from the direct impact (suppliers, contractors, service providers to the dairies, etc.). The induced impacts are the result of increased household income and related spending which is driven by the direct and indirect impacts. From these inputs, the IMPLAN model was used to calculate direct, indirect, and induced changes to employment, gross domestic product (output), and state and local tax revenues. I measured all of these impacts based upon their economic gains to the various dairy producing counties and regions of California. Additionally, I have analyzed the economic impacts of the California Dairy Quota Program upon the entire state of California. The following Table 6 summarizes my findings.

Table 6: Economic Impact of Annual Return on Dairy Quota Investments for California and the various Counties, 2014

Region	Annual Return on Quota	Output[14]	Employment	State/Local Taxes	Federal Taxes	Output (GDP)	Employment Multiplier

[14] Output represents the value of industry production. In IMPLAN these are annual production estimates for the year of the data set and are in producer prices. For manufacturers this would be sales plus/minus change in

	Investment	(Gross Domestic Product)				Multiplier	
California	**$139,358,870**	**$278,901,240**	**1,269**	**$11,087,718**	**$16,729,651**	**1.98**	**2.44**
Tulare	$24,233,092	$34,048,012	149	$1,130,949	$1,980,851	1.35	2.07
Merced-Monterey	$22,031,423	$30,506,174	144	$1,075,984	$1,864,007	1.38	1.86
Stanislaus	$19,986,916	$27,730,950	168	$959,060	$1,719,402	1.38	1.60
Kern-Los Angeles-Santa Barbara	$14,603,851	$22,684,786	109	$864,929	$1,421,943	1.54	2.11
San Joaquin	$10,072,495	$13,661,637	69	$477,724	$841,870	1.35	1.91
Riverside	$10,064,765	$13,959,369	87	$482,500	$830,912	1.38	1.72
Kings	$8,275,577	$11,048,204	43	$335,379	$605,842	1.33	1.85
Fresno	$6,982,238	$10,053,922	50	$370,634	$631,854	1.43	2.11
San Bernardino	$7,858,789	$10,243,720	60	$346,343	$642,802	1.30	1.60
Madera	$4,896,545	$6,441,722	29	$205,827	$365,241	1.30	1.89
Mendocino-Sonoma	$4,656,889	$7,213,668	36	$259,286	$421,372	1.54	2.02
Sacramento	$1,758,995	$2,466,939	14	$93,077	$145,312	1.39	1.68
Marin	$1,410,780	$1,848,804	10	$64,463	$112,802	1.30	1.61
Glenn	$1,182,320	$1,593,457	9	$51,111	$89,282	1.34	1.55
Del Norte-Humboldt	$585,282	$811,743	4	$28,804	$45,016	1.38	1.69
Yolo-Yuba	$553,239	$722,279	5	$24,323	$40,545	1.30	1.47
San Diego	$525,451	$751,322	6	$28,949	$48,069	1.42	1.45
Tehama	$85,183	$107,858	1	$3,343	$6,404	1.26	1.25
San Luis Obispo	$25,842	$35,252	0	$1,151	$2,016	1.36	1.87

The Total Annual Return on Quota Investment to dairy farmers across California for 2014 of $139,358,870 has a dramatic impact upon the state's economy. The cumulative effect of that expenditure alone results in $278,901,240 to the state's Gross Domestic Product ("GDP"). Moreover, just dairy quota payments alone result in the creation of 1,269 jobs, with over $11 million added to local and state coffers, and over $16.7 million paid to the

inventory. For service sectors production = sales. For Retail and wholesale trade, output = gross margin and not gross sales. More generally, Output is also considered in real terms, Gross Domestic Product.

federal government. Simply put, for every dollar of return on quota investment in California, another $2 is added to the total GDP (multiplier of 1.98). In addition, for every job created by quota investment return, another 2.5 jobs are created across the State. Dairy quota payments also add signifcantly to the state, local, and federal tax base.

The economic impact of total annual quota payments is no less significant to individual counties and regions across California. For example, the dairy quota owners in Tulare County (approximately 42 dairies)[15] add solely from their annual quota payments over $34 million to the county's GDP, 149 additional jobs, over $1.1 million to local and state tax revenues, and nearly $2 million to the federal government. A smaller producing county with a higher percentage of quota ownership, Marin (with 63% quota ownership = approximately 16 dairies), adds over $1.8 million to the county's GDP, 10 additional jobs, over $64,000 to the local and state governments, and $112,800 to the federal government. By every measure, California's Dairy Quota Program has a positive impact upon the state and local economies.

B. Impact of Changing the Califoria Quota Program via the Federal Regulatory Process and the Conversion to a Federal Milk Marketing Order (FMMO)

Based upon my economic valuation and economic impact analysis of the California Dairy Quota Program as I have just presented, I submit the following observations on the potential impact of changing the Quota Program:

1. To the extent that the FMMO maintains the current quota system and recognizes its full value as directed by Congressional language, dairy quota ownership continues to have the same significant and positive role in the California dairy farm economy.

[15] Derived from my previous calculation of total milk production covered by quota (14.8%) and the number of total dairies in Tulare County (281) as reported by CDFA, *California Dairy Statistics Annual, 2014 Annual Data*.

2. Any tinkering with the quota terms will create regulatory uncertainty which will diminish the economic value of quota, thereby eroding the invaluable financial investments that dairy farmers across the state have previously made.

3. To the extent that any regulatory action would threaten the value of quota or directly diminish its value, it would be materially disruptive to the individual quota owners, and to the producer side of the industry more broadly. Writing off over $1.16 billion in quota value would be disastrous for not only the individual dairy farmer, but also to the state and local economies.

V. Comparative Analysis of Quota between the FMMO Proposals

Once again, based upon my economic valuation and economic impact analysis of the California Dairy Quota Program as well as my review and analysis of the Agricultural Marketing Service's *Preliminary Economic Impact Analysis*, I submit the following comparative observations between FMMO Proposals:

A. The Dairy Institute's Proposal does not recognize the economic value of quota, but quickly diminishes the economic and financial value to the dairy farmer, wreaking substantial economic losses and financial harm

To determine that the Dairy Institute's FMMO proposal does not recognize the economic value of quota, I need not go further than AMS' *Preliminary Economic Impact Analysis* which clearly states:[16]

[16] "Preliminary Regulatory Impact Analysis of Proposals to Establish a California Federal Milk Marketing Order," pg. 21, United States Department of Agriculture, Agricultural Marketing Service, Dairy Division, August 2015.

Under the Institutes' proposal, the CDFA administered quota program would continue to exist, although participation would be optional.

In order to determine the potential impact of optional quota program participation under the Institute's proposal, the volume of milk that would potentially not participate in the California quota program, and the point at which the decision would be made to participate, had to be determined. To do so, this analysis relies on current CDFA quota ownership data, CA FMMO blend prices forecasted starting in 2017, the CA quota price and the CA overbase price. The analysis assumes that quota holders will compare their weighted quota blend price against the CA FMMO blend price and will choose to receive whichever is higher.

Since the CA FMMO blend price would be higher than the weighted quota blend price, if a producer only owns small amounts of quota, they would most likely choose to not participate in the quota pool. Under the (Dairy Institute's) proposal, the decision would be irrevocable. As more quota holders permanently exit, the value of the quota pool decreases leading to larger quota holders choosing the CA FMMO blend price over their weighted quota blend price.

The analysis observed that after the 1st decision point (which could be considered one month), quota holders with less than or equal to 25 percent of their production under quota will choose the California FMMO blend. After the 2nd decision point, quota holders with less than or equal to 85 percent of their production under quota will choose the California FMMO blend. After the 3rd decision point, the analysis predicts that all California producers would choose the California FMMO blend price over the weighted quota blend price.

As the AMS analysis undoubtedly predicts, the Dairy Institute's proposal would quickly diminish, then completely destroy the quota program and its long-held value. Within a short period of time, dairy farms with quota ownership would experience massive write-offs not only on their balance sheets, but would sustain distrastrous losses to their invaluable investment. The devaluation and ultimate elimination of their liquid asset would have negative impacts upon lending decisions, their access to capital, and their ability to purchase inputs for production such as feed, labor, energy and water. As I stated before, writing off over $1.16 billion in quota value would be disastrous for not only the individual dairy farmer, but also to the state and local economies. This is not a recognition of the value of quota, but simply a repudiation of any value.

B. The Cooperative's Proposal fully honors the authorizing Congressional legislation to "recognize quota value"

In stark contrast, the proposal submitted by California Dairies, Inc., Dairy Farmers of America and Land O'Lakes fully recognizes the history of quota, the financial investment made by dairy producers in quota, and the federal directive to preserve California's quota program. Therefore, the Cooperatives propose that the quota program be left intact without significant modifications and continue to be administered by the California Department of Food and Agriculture through a memorandum of understanding with the United States Department of Agriculture.

The Cooperative's FMMO proposal recognizes the significant value that California dairy farmers have invested in their quota ownership over the years. Over 800 dairy farmers from across the state own over $1.16 billion in quota value, that benefits their operations, and contributes to the overall state and local economies. Moreover, the Coops' FMMO proposal fully honors the authorizing Congressional legislation by maintaining the status quo in the California Dairy Quota Program. Full quota value can only be recognized with this approach.

VI. Conclusion

The dairy industry is an important and vital contributor to the agricultural and overall economy of the great state of California. As my economic analysis of the California Dairy Quota Program has shown, quota ownership is an invaluable, liquid asset that is a long-term financial investment in the viability of the California dairy industry. Not only has quota ownership allowed dairy farmers to continue in the dairy business and survive in an increasingly competitive global marketplace, but annual return on quota ownership investment has also resulted in positive economic impacts and contributions to the state and local economies through increases to the GDP, job creation, and tax revenue generation.

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Professional History

- President and CEO, The Hatamiya Group
- Director, Navigant Consulting
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- Secretary, California Technology, Trade and Commerce Agency
- Administrator, Foreign Agricultural Service, United States Department of Agriculture
- Administrator, Agricultural Marketing Service, United States Department of Agriculture
- Founder and President, BHP Associates, Inc.
- Attorney, Orrick, Herrington & Sutcliffe
- Marketing Analyst, Sony Corporation
- Purchasing Manager, The Procter and Gamble Company

Education

- B.A., Economics, Harvard University
- M.B.A., Entrepreneurial Studies and International Business, UCLA Anderson Graduate School of Management
- J.D., UCLA School of Law

Professional Associations

- State Bar of California
- American Bar Association
- International Input-Output Association

Honors and Fellowships

- United States Department of Defense, Joint Civilian Orientation Conference, Class 64
- California Agricultural Leadership Program, Class XXII
- UCLA School of Public Policy, Senior Fellow

Lon S. Hatamiya is the President and Chief Executive Officer of ***The Hatamiya Group*** in Davis, California. As an economist, Hatamiya specializes in agriculture, banking and financial institutions, international, national and regional economic analysis, econometrics, intellectual property valuation, government and public policy, entertainment and sports, and litigation support. He assists businesses and public agencies analyze existing and proposed government policies, develop strategic policy alternatives and communicate the results to decision-makers. He has testified over a hundred times before the World Trade Organization, U.S. Congress, California State Legislature, and federal, state and local courts, boards, and commissions on a wide variety of issues. He is also an accomplished public speaker, having been invited to address hundreds of gatherings around the world.

In addition, he has extensive government management experience serving at both the state and federal levels. He served as Secretary of the California Technology, Trade and Commerce Agency, the state's primary promoter of economic development, job creation, and business retention efforts. In that capacity, he also served as Chairman of the *California Infrastructure and Economic Development Bank*, as well as Chairman of the *California Travel and Tourism Commission*, the *California Defense Retention Council*, and *Team California*.

He also served as Administrator of the Foreign Agricultural Service at the United States Department of Agriculture ("USDA"), where he administered a worldwide agency of nearly 1,000 employees, including over 200 Foreign Service officers, and a budget of over $7 billion that fosters the growth of exports of American agricultural, fish, and forest products. He was responsible for USDA's obligations in international trade agreements, negotiations, and trade policy development and oversaw reporting of global agricultural production and trade and administered various export development and assistance programs, including the Market Access Program, Foreign Market Development Program, Emerging Markets Program, GSM-102 and -103 export credit programs, and Public Law 480 Title I. As Adminsistrator, he also coordinated USDA's role in international food aid programs, such as *Food for Progress*, and provided linkages to worldwide technologies and resources that can benefit U.S. agriculture.

Hatamiya also served as Administrator of the Agricultural Marketing Service at USDA, where he oversaw over 50 federal programs including dairy and fruit and vegetable marketing orders; various commodity research and promotion programs; grading and inspection of numerous commodities, including meat, poultry, dairy, tobacco, cotton, and fruits and vegetables; collection and dissemination of market price and supply information; commodity

procurement for school lunch and other federal feeding programs; pesticide data collection and recordkeeping; development of conventional and organic standards; and agricultural direct marketing and transportation. He worked closely with members of Congress to preserve the *Perishable Agricultural Commodities Act*, which protects growers from unfair trade practices, and he developed and implemented the Agency's first strategic plan to improve customer service and expand agricultural exports as well as promote diversity and the quality of work life. He initiated work to eliminate 2,164 pages of federal regulations, the largest reduction in the federal government. In this process, he was awarded three "*Hammer Awards*" from Vice President Gore's National Performance Review in recognition of increased management efficiency and cost-savings within a government program. During his time at AMS, Hatamiya also served as Chair of the USDA Task Force on Farmers' Markets, as member of the USDA/Hispanic Association of Colleges and Universities ("HACU") Leadership Board, and as an advisor to the Asian Pacific American Network in Agriculture ("APANA").

Hatamiya was also founder and President of BHP Associates, Inc., an international management consulting firm, practiced law with the international firm of Orrick, Herrington and Sutcliffe, and worked for both The Procter and Gamble Company in Cincinnati, Ohio, and The Sony Corporation in Tokyo, Japan. He also farmed and managed a peach inspection station on his family-owned H.B. Orchards, Inc. in Yuba and Butte Counties, CA.

As an academic, he previously served as Executive-in-Residence and Adjunct Professor at the UC Davis Graduate School of Management, where he taught a course on organizational change. He was also selected as a Senior Fellow at the UCLA School of Public Policy. He currently serves as a lecturer at the International Masters in Law Program at the UC Davis School of Law, and as a Senior Fellow at the University of Denver International Career Advancement Program. He has been a visiting lecturer at Harvard University, Stanford University, UCLA, USC, UC San Diego, Golden Gate University, San Diego State, San Francisco State, CSU Chico, CSU Sacramento, and Cal Poly Pomona.

In addition, he currently serves on the Advisory Boards of US Bank and the Central Valley Fund. He served on the Board of the Directors for the Environmental Power Corporation, an alternative energy, renewable biogas company, where he was also the Chair of the Compensation Committee, and a member of the Audit Committee. He also previously served as Vice Chair of the Board of Directors for SunTherm Energy, a provider of innovative thermal collectors, created through technology developed at UC Merced.

Professional Experience

Hatamiya has advised numerous banks and financial institutions on various economic and strategic initiatives. These have included economic forecasting, demographic and market analyses, and econometric impact studies. In addition, he has extensive experience in advising Fortune 100 companies, real estate development firms, trade associations, and regional and local governments on their economic development and growth strategies. He has performed economic impact studies for agriculture, retail, professional sports, energy, higher education, and transportation industry clients, measuring and analyzing their respective contributions to the local and regional economy. He has also conducted substantial economic and statistical analysis of government budgets to determine their compliance with mandates and program effectiveness, as well as extensive experience with public finance. Hatamiya has further examined the agricultural infrastructure of the northern Central Valley counties of Yolo, Sacramento, El Dorado , Placer, Yuba and Sutter, to determine applicable long-term strategies. He has also examined the food system and future agricultural economic strategies for Contra Costa County.

Hatamiya has also assisted life sciences and medical device companies in the valuation of start-up firms and new technologies. He has also computed option values and IRS Section 409A analyses for privately-held biotechnology, alternative energy, insurance, and medical device companies.

He is also well versed in litigation matters, including commercial damages, intellectual property, valuation, trade secrets, labor and employment, and sports, tourism, and entertainment. He has provided expert witness testimony at trial and deposition.

Selected Publications, Reports and Studies

"Contra Costa County Food System Analysis and Economic Strategy," March, 2015.

SACOG Regional Agricultural Infrastructure Project: "POLICY BRIEF: Analysis of Food Hub Trends and Characteristics," with Applied Development Economics, Inc., May, 2014.

"Comparative Analysis of Taxable Retail Sales and Retail Business Permits ibn California Communities – *Comparison of California Communities with Walmart Supercenters versus Those Without*," January 2014.

SACOG Regional Agricultural Infrastructure Project: "Initial Cost Estimate Analysis: Sacramento Valley Food Hub," with Appliced Development Economics, Inc., October 2013.

"The Economic Impact of the University of Miami on Miami-Dade County and the South Florida Tri-County Region – *Positive Economic Contributions to the Local Communities, the Region, and the State of Florida*," August 2012.

"An Innovative Economic Development Strategy for the City of Salinas, California – *Fresh Network with Global Ramifications*," March 2012.

"Los beneficios del libre comercio (The Benefits of Free Trade)," with Harold Lantan. El Diario De Hoy, El Periodico de El Salvador 26 March 2008:23.

"Economic Outlook Report 2007 -- U.S., California, and Selected Counties: Fresno, Madera, Merced, Sacramento, San Joaquin, and Stanislaus," with Tapan Munroe and Mark Westwind, December 2006.

"Deconstruction of Structures: An Overview of Economic Issues," with Tapan Munroe and Mark Westwind. *International Journal of Environmental Technology and Management (IJETM)*, Vol. 6, No. 3/4, 2006.

"Evaluation of Competing Rate Projections in SMUD's Proposed Annexation within Yolo County," with William Hamm, April, 2006.

"Economic Outlook Report 2006 – U.S. California, and Selected Counties: Fresno, Madera, Merced, Sacramento, San Joaquin, and Stanislaus, "with Tapan Munroe, January 2006.

"Economic Outlook Report 2005 – U.S. California, and Selected Counties: Fresno, Madera, Merced, Sacramento, San Joaquin, and Stanislaus, "with Tapan Munroe, January 2005.

"The Shafter Advantage: The California Integrated Logistics Center," with Tapan Munroe, November 2004.

"California Fast Facts 2003, 2002, 2001, 2000, and 1999: Statewide and Regional Tourism Facts and Figures," 2003-1999.

"California Workforce Development: A Policy Framework for Economic Growth," with Delaine Eastin, Grantland Johnson, and Thomas Nussbaum, 2000.