

Applied Economic Insights**Deportation Effects on the Dairy Industry**Hernan A. Tejada^a, Philip Watson^a, and Timothy Nadreau^a^aUniversity of Idaho

JEL Codes: J43, Q12, Q18

Keywords: agricultural employment, agricultural labor market, dairy, deportation, undocumented migrants

Abstract

The Trump administration has aggressively pursued deporting undocumented migrants, including those employed in the agricultural and food sector. We examine the economic impacts of deporting undocumented labor throughout the dairy supply chain and across related sectors of the US economy and, as an illustrative example, the representative dairy-producing state of Idaho.

1 Introduction

Recent USDA data (USDA-ERS 2024a) indicate that the US dairy industry—a large and labor-intensive piece of the overall agricultural sector—comprised \$50.73 billion in cash receipts alone. The top five dairy states—California, Wisconsin, Texas, Idaho, and New York—had cash receipts of \$8.61 billion, \$6.97 billion, \$3.95 billion, \$3.87 billion, and \$3.78 billion, respectively, together accounting for about 54 percent of US dairy industry cash receipts.

Dairy production requires year-round, physically demanding work to maintain animal health, milk quality, and operational efficiency. Tasks such as milking, feeding, cleaning, and herd management must be performed daily and on strict schedules; even short-term labor shortages compromise productivity and animal welfare (Njuki 2022). Because this work is year-round and not temporary, dairy laborers are ineligible for the H-2A visa program. In the United States, a substantial portion of the dairy workforce is foreign-born, with estimates indicating that more than half of all hired workers on dairies are immigrants, predominantly from Latin America (Watson et al. 2012; Adcock et al. 2015). These workers play a pivotal role in sustaining the economic viability of dairy farms by filling positions that are difficult to staff domestically due to the physically demanding nature of the work and rural location of many dairies (Richards 2018). Foreign-born labor supports the operational stability of individual dairy farms and underpins the broader dairy supply chain, making immigration policy and labor availability central issues for the long-term resilience of the US dairy industry.

Labor costs in 2024 accounted for about 16.3 percent of total US dairy production costs and 13.3 percent and 18.7 percent, respectively for California and Wisconsin, the two top milk-producing states. The average US dairy farm herd size in 2022 (US Agricultural Census 2022) was approximately 258 milk cows, but California and Wisconsin averaged 1,512 and 204 milk cows per farm, respectively.

A 2014 national survey of dairy farmers across the United States found that the percentage of immigrant labor in dairy farms was approximately 51 percent. More importantly, the dairies that produce 79 percent of the total US milk supply employ immigrant labor (Adcock et al. 2015). In 2021, the unauthorized immigrant workers in the United States comprised about 4.6 percent of the total US labor force, while the agricultural sector had the largest percentage of unauthorized immigrant workers relative to native and documented workers (Passel and Krogstad 2023).

2 Recent Immigration Reforms

On January 20, 2025, the day President Trump's second term began, he signed Executive Order 14159, titled "Protecting The American People Against Invasion," which revoked multiple Biden-era orders related to immigration (including ones protecting asylum seekers and immigration enforcement priorities) and pledged to enforce immigration laws aggressively, including through expedited removal of what the executive order referred to as "removable aliens." The Trump administration has been enforcing its undocumented migrant deportation mandate via raids conducted by the Immigration and Customs Enforcement (ICE) and executed in different cities and across sectors. A Home Depot store in Los Angeles was raided, and several undocumented immigrant workers were arrested (Harter et al. 2025). An auto battery facility under construction in Georgia experienced the arrest of about 475 undocumented workers (Jin et al. 2025). On July 10, more than 360 alleged undocumented immigrants were apprehended by ICE from Glass House Cannabis Farm in California (Diaz 2025).

In the agricultural sector, vast production consequences from ICE raids have left crops unharvested in California, Texas, and Pennsylvania (Rahman and Gooding 2025). This is only one example of effects in agricultural crop production. Raids specifically in the dairy industry and milk production have occurred across the United States. A raid at a Vermont dairy left producers uncertain about viable labor options (Rahmer and Swinhart 2025). In general, dairies have faced increasing concerns about the effect of these actions on their production viability (Bohnert 2025). These policies have had significant effects on the dairy supply chain from farm to retail. Resulting labor shortages could disrupt production and generate ripple effects across related sectors. By using an input-output model, we first present the effects for one dairy-producing state, Idaho, and then address how immigration policy would affect the country in general.

3 Economic Impacts of Immigration Reforms on Dairies

The expected economic impacts on dairies of deporting undocumented labor are very much dependent on how the policies are implemented. Specifically, we study what might happen if a leading dairy state like Idaho were to unilaterally enact strict immigration enforcement; the state would be at a competitive disadvantage relative to states with more lenient enforcement, driving up production costs in Idaho but not in other states. In the short run, this would dramatically increase the costs of labor from hiring native-born labor (i.e., affecting their economic viability), while forcing Idaho dairies in the medium to longer run to look at other options, including automating or relocating out of state. With a reduction in dairy output, linked milk processors (e.g., cheese makers, yogurt producers, milk powder manufacturing) would lose their primary reason for being located in Idaho, and the state's milk processing sector would also lose some of its competitive advantage. The policy would likely have substantial negative economic impacts on the state in terms of output, employment, and gross state product. However, a state-level immigration enforcement policy would likely not have a significant impact on overall US milk production, since dairy production can relocate to other states, and Idaho's loss might be another state's gain. In this scenario, the overall price of milk and dairy products would be anticipated to remain unaffected, and consumers across the country would not be greatly impacted.

To evaluate and quantify the potential economic impacts of increased immigration enforcement on a state's economy, we built an input-output model for the representative state of Idaho, a major dairy and milk processing state that depends on foreign-born labor in the dairy sector (Watson et al. 2012). As stated, the economic impacts on a given state are expected to be largest when that state enacts immigration policy unilaterally. Therefore, we evaluate the scenario where only Idaho enacts immigration policy changes. Additionally, the input-output model employed here does not incorporate price changes, and the scenario where one state unilaterally adopts immigration policy changes is expected not to significantly affect overall national supply and milk prices.

According to the Quarterly Census of Employment and Wages published by the Bureau of Labor Statistics, in Idaho, 7,259 people were employed on dairies in 2024 across about 350 dairy establishments (unsuppressed QCEW data is available from the Tapestry database, Watson and Alward 2024, and is accessible at uidaho.edu/tapestry or mydearwatson.net/tapestry). This represents just over 7 percent of the total US dairy labor force. Sources within the Idaho dairy industry report that 90 percent of industry employment in the state is foreign-born, with roughly 50 percent of that workforce not having legal immigration status, as previously estimated in Watson et al. (2012).

Constraining the Idaho dairy industry by removing 3,267 current employees is estimated to reduce direct dairy production by \$1.92 billion (Table 1). That reduction in dairy revenue will disrupt Idaho supply chains by an additional \$1.87 billion, leading to total Idaho sales falling by just over \$3.79 billion. Converting these numbers into gross state product (GSP), Idaho's economy is expected to contract by \$1.24 billion or roughly 1.1 percent of the entire economy. It is relevant to note that total sales measure the overall reduction in economic activity, while GSP reflects only value added. Hence, GSP declines as reflected here are smaller since they exclude intermediate inputs and thus provide a clearer measure of income loss. This simulation reflects only the immediate losses from the deportation of undocumented dairy production labor. Losses in the forward-linked dairy processing segment would follow quickly, and conservative estimates suggest a lower-bound loss of an additional \$417.47 million in GSP (Peterson and Nadreau 2026).

This simulation assumes that other states do not experience the same labor market disruptions, leading to long-run scenarios where milk production and processing exit Idaho for lower-cost producing states with more stable labor markets or more capital-intensive operations. Under strict nationwide immigration enforcement, states like Wisconsin, with lower foreign-born populations operating in the dairy industry, would provide a comparative advantage for such production and processing firms. Even so, such a firm relocation would be unlikely to stave off the expected price increases.

In the case of the policy of strict immigration enforcement being enacted at the federal level, including all the major dairy-producing states, then a different economic impact scenario would likely occur. In this situation, it would be anticipated that the long-run shift in the industry would be toward automation, continuing the pursuit of economies of scale. Conversely, in the shorter run, as labor and production costs rise from hiring native labor, there will be increased pressure to produce more output per worker and value added per worker—both of which are conceivably partially achieved through increases in capital and scale.

The increases in costs of production in the dairy sector would be expected to be passed largely on to the processors and ultimately to consumers, and the price of milk and dairy products would inevitably increase. While dairies and milk processors will undoubtedly be harmed to some degree, especially in the short run, the increase in the price of milk will largely negatively impact consumers of milk and dairy products across the country. The effects on the output, employment, and value added across the dairy supply chain would be substantial. While consumers would be significantly affected by the increase in income expenditure for consumption of dairy products, it would, conversely, result in lower income for nondairy food expenses.

To provide some national context on the potential extent of the economic impacts of a labor force disruption to the dairy industry in the United States, we must first reiterate our previous discussion, namely, that if labor force disruptions in dairy production were to occur at the national rather than at a state level, then consumers rather than producers would largely feel the effects. In 2024, QCEW reports that there were over 103,000 wage and salary jobs in dairies in the United States. Like any factor of production, we would expect that if this labor force were to be exogenously reduced, we would see major shocks to the milk supply in the United States. Using an input-output model assumptions of a zero price elasticity of demand and zero substitutability of labor and capital, then removing 50 percent of the dairy workforce (i.e. the foreign-born labor force in the dairy industry), we would expect to see a national dairy production reduction of almost \$60 billion in economic output accompanied by a reduction in total gross domestic product of just under \$20 billion (Table 1).

Table 1. Predicted economic effects of deporting 50 percent of the dairy workforce

Scenario	Dairy Output Change (\$billion)	GSP Change (\$billion)	Employment Change
Idaho (state level)	-1.92	-1.24	-3,267 jobs
US (national level)	-60.0	-20.0	-51,000 jobs

However, it must be said that the true economic impacts of such a drastic economic policy are hard to specifically quantify at a national scale. Certainly, in the face of these shocks, producers and consumers would adjust to new economic conditions. Therefore, concepts such as elasticities of substitution between factors and between goods will be crucial to the final economic outcomes (Watson et al. 2012). However, we can say with a high degree of certainty that reducing the supply of dairy labor, a primary factor of production revealed through market forces to be crucial to dairy operations, would, at least in the short run, decrease economic efficiency, increase the costs of production, and increase prices to consumers. Policymakers may choose to enact immigration reforms for various reasons, but it must be unequivocally stated that—at least in the case of the US dairy industry (and likely most industries)—economic output or gross domestic product is most likely to be harmed, not helped, by these policies. Historical parallels can be drawn to post-Bracero mechanization, where rising labor costs spurred automation. Likewise, stricter immigration enforcement could accelerate capital-intensive technologies and herd consolidation, particularly in larger dairies.

Furthermore, the deportation of undocumented dairy laborers has implications for the US dairy trade. Key partners—Mexico, Canada, and the European Union—may increase exports to the United States to fill supply gaps, leading to trade balance adjustments as domestic production declines.

4 Conclusions and Implications:

There could be substantial economic effects on the dairy industry from deporting the undocumented labor. While the case of a single state enforcing such a policy would expressly affect that state's milk production operations and the processing sector located mainly in the state and surrounding areas, the consumer would remain largely unaffected since other states would increase production and fill the gap. That is, the economic downfall from the labor deportation on a state's dairy industry would have a significant effect on the economy of the state.

Conversely, deportation enforcement policy carried out across the United States would massively affect the dairy industry across the supply chain, and all the way to the consumer. The main reasons are a significant drop in the supply of milk, affecting dairy processing and leading to a rise in consumer prices. The extent of these impacts is difficult to predict precisely since dairies might be able to substitute other inputs like machinery for labor, but the degree of substitutability and time required to adopt alternative production methods are unknown. However, it is clear that it would have an overall enormous economic effect on the industry and its consumers.

In summary, deporting undocumented dairy labor would generate major economic disruptions. At the state level, Idaho's dairy sector would lose about \$1.92 billion in output and \$1.24 billion in GSP, while nationwide enforcement would reduce GDP by nearly \$20 billion and raise consumer prices for dairy products. In the long run, automation may mitigate some effects, but short-run impacts would be substantial across the supply chain and consumer markets.

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Acknowledgments: This study was funded in part by USDA-NIFA, Hatch project IDA0-179 and the Idaho Agricultural Experiment Station.

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DOI: <https://doi.org/10.71162/aeed.554166>

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