

Farm Labor Shortages and the Economic Evidence of the Declining Competitiveness of U.S. Fruit and Vegetable Producers: A White Paper

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Introduction

In a recent publication Dr. Phillip Martin, an agricultural economist at the University of California at Davis argued that U.S. producers of labor intensive agricultural commodities claims that they were facing labor shortages were not supported by economic evidence.² He suggested that the economic evidence that would indicate labor shortages would be rising agricultural wages and reduced production of labor intensive commodities. With respect to the later, he noted that fruit and vegetable production in the U.S. had increased. He cited, in particular, data on increases in U.S. strawberry and lettuce production, both labor intensive commodities, as indicative that the economic evidence did not support a claim of a U.S. farm labor shortage. This white paper examines this aspect of Dr. Martin's critique, namely that the data on U.S. fruit and vegetable production is inconsistent with a claim of labor shortages.

In previous papers and congressional testimony I have pointed out that in a globally competitive economy with open markets, the adjustment to reduced labor supplies, for example as a result of improved effectiveness of immigration control, will not be significantly rising farm wages, but rather reduced global and domestic market share of labor intensive agricultural commodities for U.S. producers. The reason for this is that wages make up a substantial portion (by definition) of the production cost of labor intensive agricultural commodities. If the supply of labor is restricted, this will indeed create upward pressure on farm wages. But increases in farm wages will increase the cost of domestic production vis a vis foreign production, causing domestic production to become less profitable, and in some cases unprofitable. This upward pressure on U.S. farm wages will induce some domestic producers to reduce or cease production of labor intensive commodities, and/or fail to increase production as markets expand, thereby ceding their market share to foreign producers. (This is predicated on the likelihood that foreign producers have an ample capacity to increase production of labor intensive agricultural commodities at little or no increase in unit costs of production.) The economic pressure causing shifts in market share from U.S. to foreign producers will continue until domestic production has been reduced to the point where the U.S. farm labor supply is once again adequate to produce the remaining domestic production at globally competitive production costs, and there is no longer any upward pressure on U.S. farm wages.

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² Philip Martin, *Farm Labor Shortages: How Real? What Response?*, unpublished. October 31, 2007

Rather than focusing on absolute changes in U.S. production of labor intensive fruits and vegetables, as Martin did, we examined data indicative of whether U.S. producers' market share of labor intensive fruits and vegetables is growing, remaining stable or declining. U.S. and global markets for labor intensive agricultural products have grown rapidly as a result of shifting consumer tastes and preferences and growing consumer income that enables consumers to act on those changing tastes and preferences. Even with a declining labor force, U.S. producers have improved productivity sufficiently that they have been able to increase production. However the real evidence of whether they are maintaining their competitiveness is in market share. A stable or growing market share of labor intensive farm products for U.S. producers would indeed call into question claims of labor shortages, though it would by no means disprove them. However, a declining market share for U.S. producers would be strong economic evidence consistent with claims of labor shortages, though again it would not necessarily prove such claims.

Market Share of U.S. Producers of Labor Intensive Commodities

Table 1 presents data on the share of U.S. fruit and vegetable consumption imported and the share of U.S. fruit and vegetable production exported for 1990 and 2006, approximately the period covered by Martin's study. This table documents two points. First, foreign producers are indeed significantly active involved in U.S. fruit and vegetable markets, even for fresh fruits and vegetables, which are the most difficult and expensive to transport. Second, table 1 shows that U.S. producers' share of the U.S. market for fresh fruits and vegetables has shrunk substantially during this period. Nearly a third of fresh fruit and a fifth of fresh vegetables consumed in the U.S. is now imported, double to more than double the proportions in 1990. The table shows that exports have remained at an almost level share of U.S. production. Since global markets have grown significantly during this period this suggests that U.S. producers are losing global as well as domestic market share.

Tables 2 and 3 present data on imports of selected specific vegetables and fruits into the United States and the percentage of domestic consumption of fruits and vegetables for the period covered by the Martin study. Not all data is available for all fruits and vegetables, and there are some differences in the data available for fruits and vegetables. an examination of the data makes two points overwhelmingly clear. First, there are significant imports of virtually all fruits and vegetables into the United States, including highly perishable fresh fruits and vegetables. These are indeed global markets. Secondly, U.S. producers are losing market share to imports of virtually all fruits and vegetables grown in the U.S., including fresh production, but especially frozen and canned production and juices.

A few caveats are in order before examining the data in detail. First, as already noted, the domestic market for fruits and vegetables has grown enormously during the period covered by the Martin study. An expanding market increases demand for both domestic production and imported products.

Secondly, not all imported fruits and vegetables compete directly with domestic production. In some cases imported product extends and expands the market for a commodity by providing availability during periods of the year when domestic production is low or zero. For example, fresh grapes and asparagus are now available in stores virtually year round, even though domestic production occurs only during certain seasons. In particular, imports of some commodities from the southern hemisphere occur at times when no U.S. production is available. This complementarity is, of course, only true for fresh commodities which cannot be stored. Imported apples and other storable fruits and vegetables will almost always compete with domestic production. Imported frozen and canned product will also almost always compete directly with domestic frozen and canned production.

Table 2 shows the change in the volume and market share of imports of fruits from 1990 to 2006. In every category except juice, the share of domestic consumption from imports of fruit has at least doubled to more than tripled. (Note that bananas have been excluded from this table to avoid biasing the results, as bananas are by far the highest volume imported fruit, and are not grown in the United States.)

Relatively small percentages of imported product do not necessarily mean that imports do not play a significant role in affecting the domestic market price for that product. For example, the imported share of fresh market apples is only 7.1 percent (up from 4.7 percent in 1990). However, this clearly indicates that foreign producers can produce and put apples into the domestic market at a competitive price. If domestic producers tried to increase prices significantly, for example to offset rising wages for farm workers, this could easily induce foreign producers to increase production and draw more imported product into the domestic market.

The same is true for strawberries. Although Martin cited the increased domestic production of strawberries as contradicting the assertions of farm labor shortages, imports of strawberries have increase even more rapidly, now accounting for about 8 percent of the fresh market and one third of the frozen berry market. The import share of both fresh and frozen strawberries have increased significantly since 1990. Taking that into account, the increase in the domestic production of strawberries looks much less impressive.

Some fruits have been especially hard hit by imports. Domestic pineapple production, primarily in Hawaii, was already facing stiff competition from foreign producers in 1990. Domestic pineapple production has now all but been supplanted by imports as the agricultural wage rate in Hawaii is the highest in the nation at over \$ 11 per hour for production workers. Other fruits that have seen substantial displacement of market share are pears (23 percent, up from 12 percent), apricots (22 percent, up from 6 percent), plums (22 percent, up from 13 percent), fresh grapes (now at 56 percent imported), and fresh avocados (at 64 percent imported). Domestic olive producers have been nearly displaced, as imports now constitute more than 85 percent of domestic consumption.

Although aggregate data for all vegetables is not available, the same pattern of substantial increases in imported market share of vegetables are evident in Table 3. Again, certain commodities have been hit especially hard, such as artichokes, asparagus, cucumbers, and garlic. Garlic is especially interesting as domestic producers have faced severe competition from Chinese producers. Imports have risen from 17 percent to 54 percent of domestic consumption in just a decade and a half, while the proportion of domestic production which is exported declined from nearly 16 percent to about 5 percent.

Implications for U.S. Agricultural Immigration Policy

The United States faces a serious economic, labor market and security challenge. The demographics of the U.S. population are such that we are barely replacing the existing work force through native born workers. We are not coming close to producing enough native born workers to meet the requirements of our growing economy. This has been true for more than a decade. Yet our legal immigration policies have been largely blind to the labor force needs of the economy. As a consequence, we now have millions of persons living and working in the U.S. illegally. And a good thing for us that this is so. Our economic growth over the past decade has been sustained and nourished by our failed immigration policies.

Agriculture has been particularly affected by the shortage of legal native born and immigrant workers, for reasons that seem obvious on their face. With millions more jobs in the U.S. economy than there are legal workers to fill them, the legal workers have migrated to the more skilled, non-seasonal, more pleasant, urban, higher paying jobs. This is not an indictment of U.S. agricultural jobs. It is a reflection of the reality that when there are more jobs than workers, the less attractive jobs are more likely to go unfilled. If these jobs were not critical to our national economy and security, this might not necessarily pose a problem. But when they are in an industry as critical as the food and fiber sector, it poses a serious problem.

It is clear from the data presented in this report that the market for labor intensive agricultural commodities is a global market, and that U.S. producers are losing market share in this global market, even as U.S. farm wages rise, U. S. farm labor productivity increases, and the proportion of the agricultural work force which is working illegally in the U.S. skyrockets. Whether this set of circumstances constitutes evidence of a “farm labor shortage” or not may be an interesting point for economists to debate, but it is beside the point. The important public policy question is what to do about it. Certainly mechanization and all the other mechanisms for continuing to improve agricultural labor productivity need to be supported. Certainly the wages, benefits and working conditions of U.S. farm workers need to continue to be protected, and improved to the extent possible consistent with maintaining economic competitiveness. But to suggest that these mechanisms will eliminate the need for guest workers is a pipe dream, and to rule out a responsible guest worker program, and thus consign the U.S. to growing dependence on foreign producers for its food and fiber, is irresponsible.