



Domestic Support Reform? A Closer Look at EU Policies Applied to Processing Tomatoes Between 1978 and 2008

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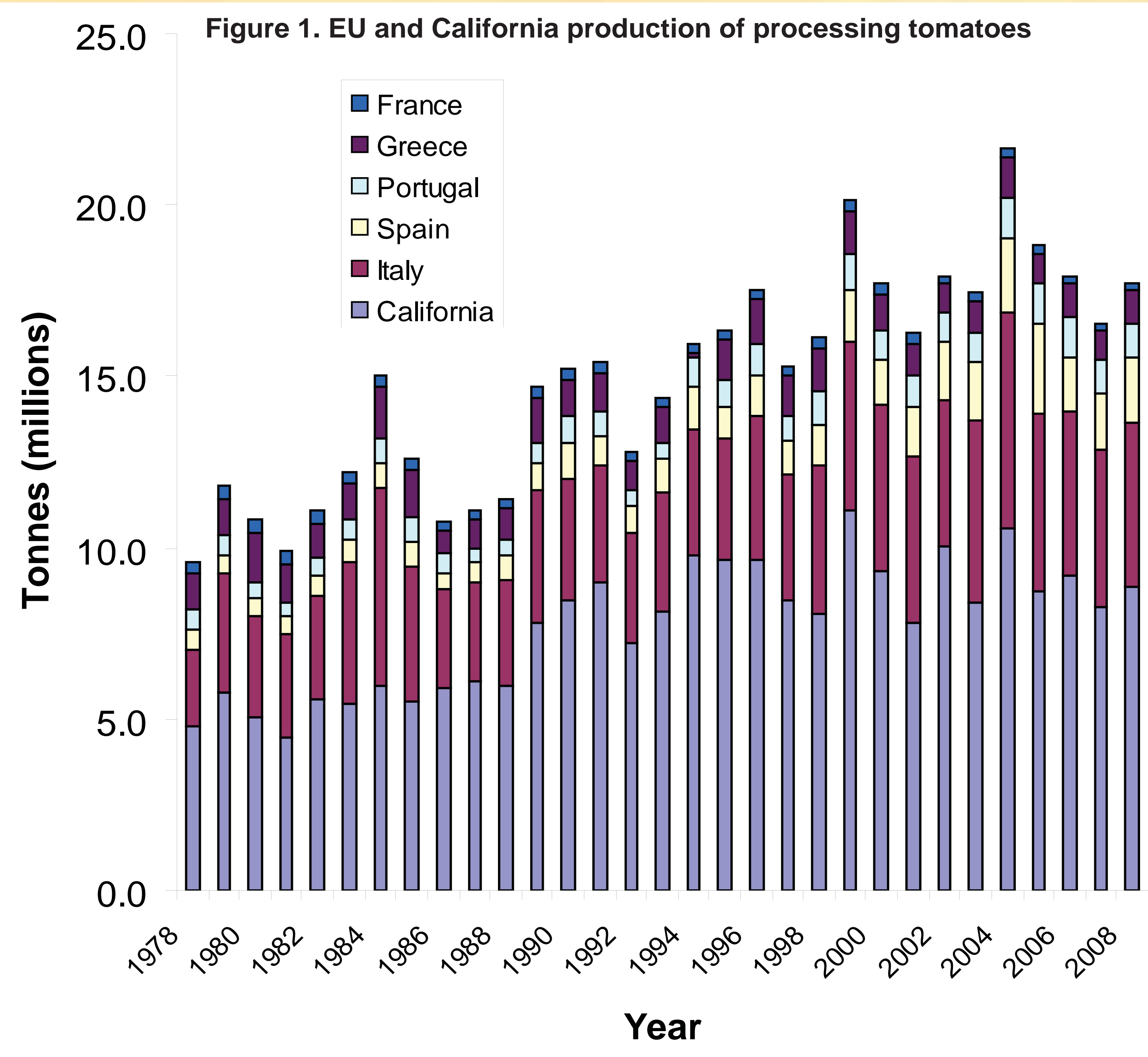
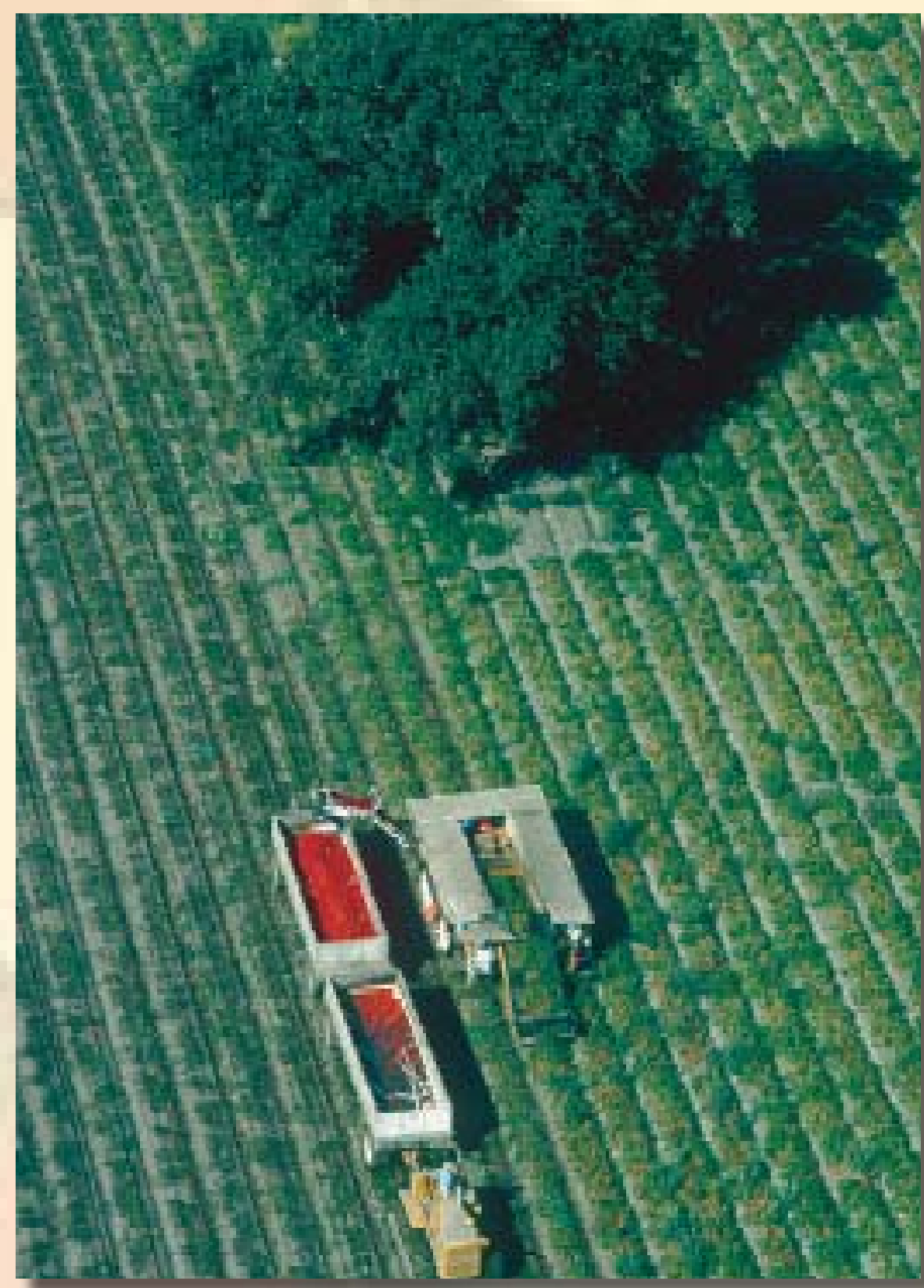
Introduction

Much research has been devoted to understanding the economic consequences of domestic support applied to agricultural markets, and the effects of altering domestic policy instruments. WTO trade negotiations have attempted to limit the type of domestic support used by members and the link between domestic support and traded quantities.

In 2003, the Common Agricultural Policy (CAP) in the European Union (EU) introduced the Single Farm Payment (SFP) for various animal products and field crops. In 2006 the SFP was applied to cotton and olive oil, and in 2007 the EU decided to extend the SFP to various fruit and vegetable crops, including processing tomatoes. (In the United States, payments under the Agricultural Marketing Transition Act (AMTA) were introduced in the 1996 Farm Bill; renamed "direct" payments remained in the 2002 and 2008 Farm Bills.

Our research explores the consequences of "reforms" of the EU processing tomato regime with the extension of the SFP.

Figure 1 shows the quantity of tomatoes produced in the five key tomato growing countries within the EU and in California between 1978 and 2008. The EU and California are the two largest producers of processing tomatoes and collectively account for approximately 65% of global production. In addition, Figure 1 indicates that production in California was relatively constant between 1990 and 2008 whereas there has been growth in European production



Methodology

We develop a model to simulate EU production responses to the policy changes that have been applied to processing tomatoes. We simulate the production effects of introducing the single farm payment in both 2001 and 2008 to understand the net impact of the policy regime that was applied to EU processing tomatoes between 2001 and 2007.

Our understanding of the EU domestic support regimes is based on the published EU regulations, and was further developed through discussions with industry sources. The simulation model here builds upon previous work by including two types of idiosyncrasies found in the EU processing tomato sector. First, the domestic support regime that was in place between 1978 and 2000 did not affect all processors across EU member states equally. More specifically, the effects of the domestic support regime prior to 2001 varied across processing plants, and depended on the ratio of production to entitlement quota. Second, the analysis is complicated by the fact that many processors actually paid an average price for processing tomatoes rather than the minimum price for in-quota processing tomatoes and another (lower) price for over-quota processing tomatoes. Figure 2 outlines marginal costs for three types of plants (those that produce less than, equal to, and greater than their quota). The response to the average price for production greater than quota is also characterized in Figure 2. Figure 3 illustrates the simulated effects from the 1978 to 2000 regime to both the 2001 and 2008 regimes.



Review of EU Policies Applied to Processing Tomatoes

Prior to 2001, EU domestic support for processing tomatoes was a complex regime that included quotas, processor aid, and minimum price to growers of processing tomatoes. The European Commission provided aid directly to tomato processors with the condition that processors paid growers a minimum price for processing tomatoes. The entitlement quota specified a fixed quantity of eligible processing tomatoes, was assigned to individual processing plants, and was non-transferable. In many years, not all member states exceeded their national entitlement quota allocation, and many processing plants in the EU did not exceed their quota allocations.

Beginning in 2001, EU domestic support included a 34.50 euro per ton payment to growers or an approximate ad valorem subsidy of 43%. The 2001 regime also included a "threshold" quantity for each nation. Aggregate production in each nation relative to its threshold quantity served as a basis for adjusting payment rates in future years, but did not affect payment rates in any year.

In 2007 the European Commission decided to extend the SFP to various processing fruits and vegetables that had previously received support. Processing tomatoes will receive a two-part subsidy as the SFP is phased into existence between 2008 and 2011. The first part of the subsidy will be a coupled payment that continues the program that existed during 2001 to 2007 and is linked to production. In addition, during the period 2008 to 2011 processing tomato growers will receive a decoupled payment based on historical payment levels which will not be tied to current levels of production. During the transition period between 2008 and 2011 the ratio of coupled to decoupled payments will decrease; beyond 2011 EU growers will only receive a decoupled payment.

Table 4. Simulated effects from changes to EU domestic support

Variables	Policy Experiment			
	Shift to SFP in 2001	Add domestic support 2001 ^a	Net effect of domestic support shift 2000 to 2001	Net effect of domestic support shift 2007 to 2008
	<i>Percent Change</i>			
Price ^b	8.6	-14.4	-5.2	16.2
Total quantity	-4.3	7.2	2.6	-8.1
Quantity supplied ^c - L	-8.5	7.5	-1.6	n/a
Quantity supplied ^c - A	-4.8	7.2	2.1	n/a
Quantity supplied ^c - G	-3.3	7.1	3.6	n/a
Grower price	-8.6	14.4	5.2	-16.2
Processor price	21.5	-36.0	-13.0	42.0

^a Under the assumption that the pre-2001 domestic support regime had first been removed.

^b Price refers to the aggregate market for all processed tomato products in the EU.

^c The subscripts L, A, and G are used to represent the groups within the EU that produced less than, at, and greater than their quota entitlements.

Figure 2. Net marginal costs for EU processed tomatoes, 1978 to 2000

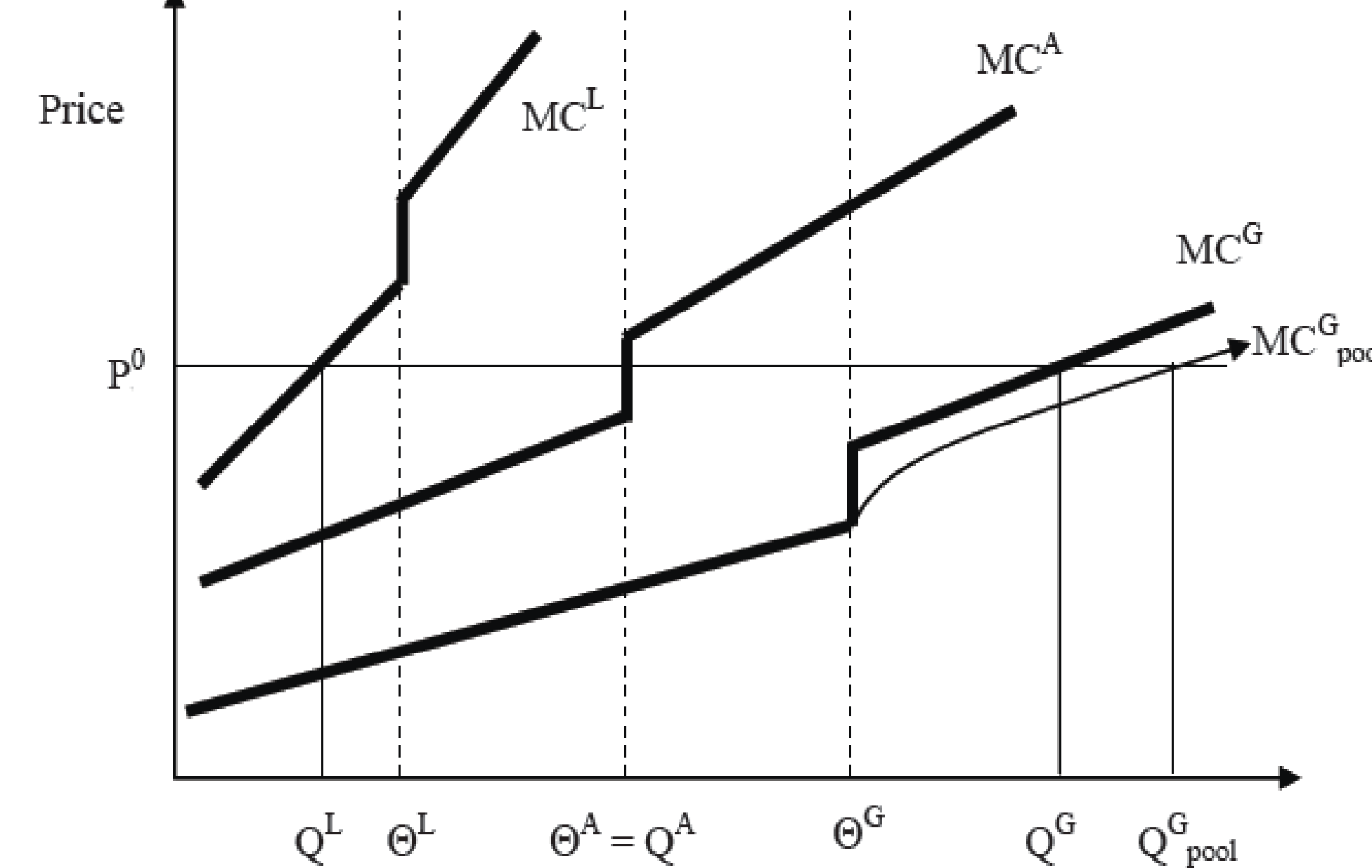
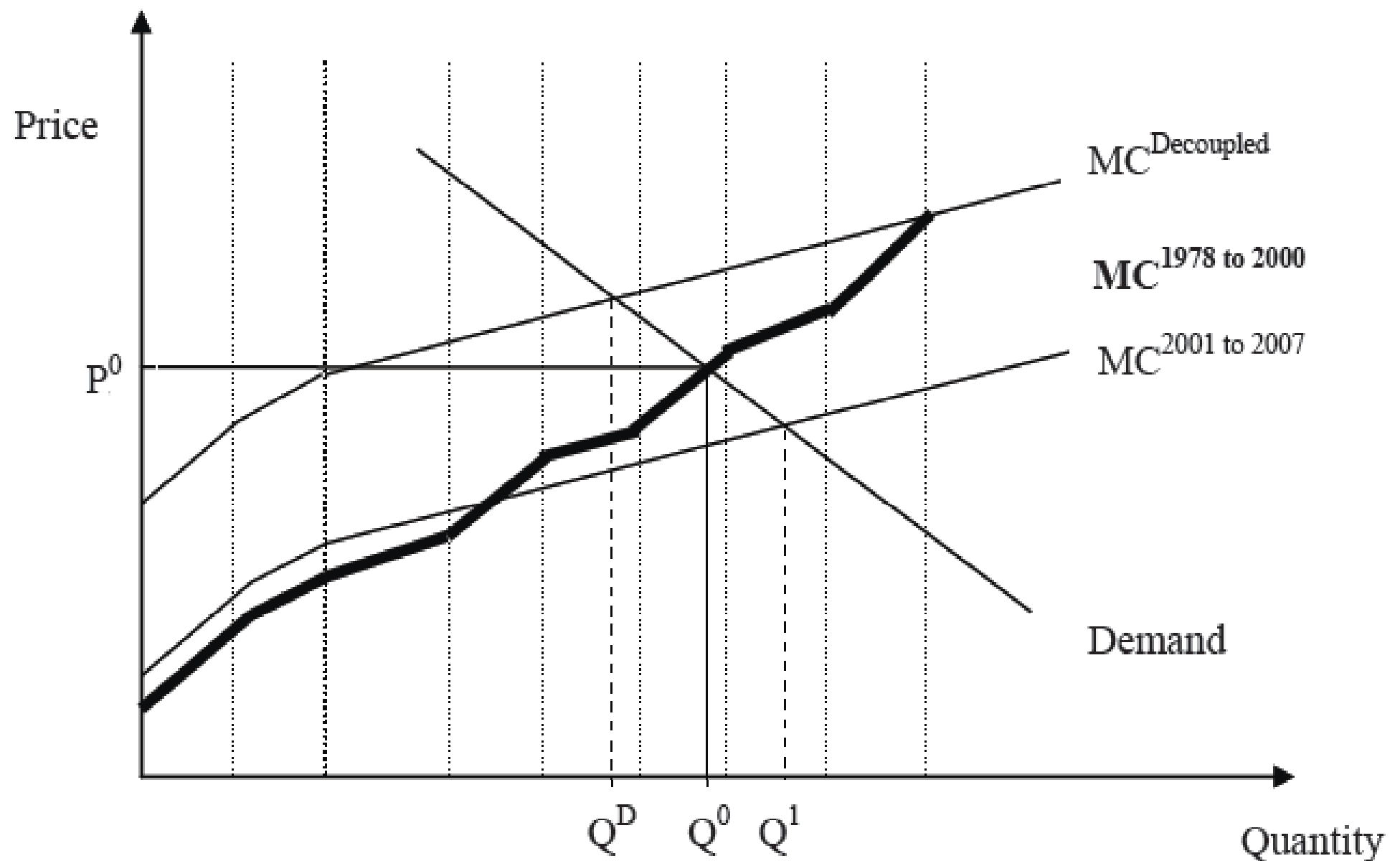


Figure 3. Simulated effects of the three policy regimes, 1978 to 2008



Results and Implications

As shown in the second column in Table 1, introducing the SFP in 2001 would have decreased EU production by 4.3%; EU production would have fallen from approximately 8.4 to 8.0 million tons. In 2001, production in the group characterized as producing at quota would have decreased by 4.8%, production in the group characterized as producing above quota would have decreased by 3.3%, and the quantity produced in the group characterized as producing below quota would have decreased by 8.5%. The third column of Table 1 shows the effects of implementing the EU domestic support regime in 2001 and the fourth column shows the net effects of switching from the 2000 regime to the 2001 regime. The results show that the net effect of switching regimes in 2001 decreased the price of the aggregate processed tomato product by 5.2%, and increased total EU production by 2.6%.

The domestic support regime applied during 2001 to 2007 was less constrained and was applied to all quantities produced, and therefore stimulated an additional 650,000 tons of tomatoes per year. The implementation of the SFP in 2008 is expected to significantly decrease EU tomato production in 2008; the final column in Table 2 shows that production levels in 2008 will fall by 8.1%. However, total EU production will remain approximately 100,000 tons higher in 2008 relative to what it would have been if the SFP had been initiated in 2001.

Policies applied to processing tomatoes in the EU are shared by many other EU fruit and vegetable sectors, including fresh and processed peaches, nectarines and pears, and citrus fruit. Examining policies, and changes to the policies, applied to processing tomatoes will shed light on questions concerning policy reform in other EU fruit and vegetable products.

