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# A Comparative Analysis of Antitrust Regulations in the Agricultural Sector in Israel, the US and the EU

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#### **Abstract**

The Israeli agricultural sector enjoys a far-reaching exemption from antitrust regulation. The exemption includes farmers and wholesalers of agricultural products and enables restrictive arrangements, which may reduce competition. A comparative analysis of antitrust regulation in Israel, the European Union and the United States shows that the exemption in Israel is relatively narrow with regard to the products included but much wider with regard to the exempted firms. There are economic arguments which support exempting farmers and farmers' associations from the prohibition of restrictive arrangements to enable cooperation in production, marketing, promotion and research, but the exemption of wholesalers of agricultural products could not be justified on the grounds of economic efficiency.

**Key words**: Antitrust Regulation, Agriculture, Cooperatives, Market Power.

#### Introduction

The objective of antitrust legislation is to protect the public from restriction of competition. The Israeli Antitrust Law (1988) regulates three areas: the definition and supervision of monopolies, the approval of mergers, and the prohibition of arrangements between firms which restrict competition. The Israeli agricultural sector enjoys a far-reaching exemption from the prohibition of restrictive

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arrangements. This exemption includes farmers and wholesalers of agricultural products. The exemption allows three types of restrictive arrangements: (a) between farmers, (b) between wholesalers and farmers, and (c) between wholesalers.

In the past, the agricultural sector in Israel was characterized by government intervention in production (production quotas, minimum prices) and exports (statutory export monopolies). Agricultural cooperatives were responsible for marketing most agricultural products in the domestic market. Since the beginning of the 1990s, the organization of agricultural production and marketing in Israel has changed dramatically. Motivated by government policy to decrease public intervention in the economy and to privatize state monopolies, the agricultural sector was reformed, production quotas were abolished and exports were opened up to competition by granting export licenses to commercial firms, while parastatal monopoly exporters either ceased export operations or had to begin competing with those firms. Despite the decline in government intervention and the transition to a market-oriented sector, the agricultural exemption was not changed.

The agricultural exemption from antitrust regulation is not unique to Israel. Buccirossi et al. (2002) analyzed competition policy and the agribusiness sector in the EU, based on rulings of the EU competition authorities relating to four levels of the agri-food chain: input suppliers, farmers, manufacturers, and retailers. Farmers are seen as the link in the chain with the weakest market power. As farmers are generally atomistic operators, the farm level usually does not pose competitive problems; on the other hand, it bears the negative consequences of upstream and downstream concentration. Buccirossi et al. emphasized the need for an effective competition policy to mitigate the market power of suppliers or customers of farmers. Crespi and Sexton (2003) analyzed the partial exemptions from antitrust law enjoyed by agricultural cooperatives and marketing orders in the US. The authors presented the rationale behind the legislation and discussed the limitations that cooperatives and marketing orders in the US face in achieving substantial market power. Bergman (1997) studied the behavior of marketing cooperatives in light of the preferential antitrust treatment for cooperatives in many countries. His theoretical analysis showed that the welfare effect of a monopolistic cooperative is ambiguous, compared with an integrated investor-owned firm, if there is the possibility of price discrimination. Without price discrimination, the cooperative monopoly will replicate the competitive equilibrium. Reich (2007) performed a comparative law analysis of the agricultural exemption in Israel and in major developed economies against the backdrop of their specific political and economic circumstances. He concluded that the statutory exemption for agriculture in Israel must be replaced by a more restricted exemption incorporated into a new block exemption. An OECD document (2004), summarizing an OECD Competition Committee debate on competition and regulation in agriculture, concluded that "elimination of competition law exemptions for the agro-food sector would increase the role of markets and generally benefit consumers." On the other hand, EU and German competition authorities concluded in their submissions to the discussion that their respective agricultural exemptions are of limited relevance because they cover arrangements that in any case would not raise competition concerns.

Several attempts to modify the agricultural exemption in Israel have failed because of strong opposition by farmers' associations and the representatives of the farm lobby in the Knesset (the Israeli Parliament). In view of the extensive changes in the agricultural sector, it is our objective to provide evidence about the economic impact of the agricultural exemption in Israel and to examine whether it is still justified from the standpoints of economic efficiency and fairness <sup>1</sup>.

We commence with a discussion of the purpose of antitrust regulation and possible justifications for special treatment of the agricultural sector. We then perform a comparative analysis of antitrust policy in Israel, the US and the EU. The proponents of a wide exemption in Israel persistently argue that other countries also exempt the agricultural sector from antitrust regulation, and that the agricultural exemption in those countries is even wider than the current exemption in Israel. Our analysis deals with the rationale for the exemption and its scope (exempted firms, type of agreements and products), the implementation of the law, its economic impact, and other legislation sheltering the agricultural sector from antitrust regulation (marketing boards in Israel, marketing orders in the US, the CAP (Common Agricultural Policy) in the EU). We conclude with suggestions for a reform of Israeli antitrust regulation in the agricultural sector.

## Is Special Treatment of the Agricultural Sector Justified?

Most developed countries have laws regulating firms' behavior which are designed to protect competitive markets. According to the former president of the Israeli High Court of Justice, Aharon Barak, "antitrust regulation is the Magna Carta of consumer rights and free competition." Monopolies and cartels are the main threat to competition, but more generally, any dominant firm or group of firms with the

- 1 A previous version of this paper (in Hebrew) was published as a discussion paper, the Center for Agricultural Economic Research, The Hebrew University of Jerusalem (Kachel and Finkelshtain, 2005).
- 2 Court ruling of the High Court of Justice (2247/95), Appeal General Director of the Israel Antitrust Authority v. Tnuva in the merger with slaughterhouse "Of Ha'Negev". The court ruling cites from "United States v. Topco Associates Inc., 405 U.S. 596, 610".

potential to exercise market power may restrict competition. The tools of antitrust regulation are the definition and supervision of monopolies, the approval of mergers only in cases where competition is not threatened, and the prohibition of arrangements between firms which restrict competition.

The application of antitrust regulation recognizes that cooperation between firms may also have beneficial effects, in particular efficiency gains (OECD, 2004). The trade-off between the exercising of market power, which decreases welfare, and efficiency gains associated with lower cost of production is acknowledged by antitrust legislation. Merger decisions or decisions about restrictive arrangements which do not involve hard-core cartel provisions require an economic analysis of the impact on competition and welfare. In addition, antitrust regulations include exemptions for restrictive arrangements which are generally recognized as economically beneficial.

In many countries, the agricultural sector enjoys a limited exemption from antitrust regulation. Agricultural production is characterized by biological production processes, which are influenced by the weather. As a result, it is impossible to completely control production quantity and quality, and production is often seasonal while demand is generally distributed more evenly throughout the year. The structure of agricultural production is atomistic (many small farmers), while farmers in many countries are faced with a relatively concentrated marketing sector. In addition, many agricultural products are highly perishable. These characteristics lead to large fluctuations in supply and prices, hamper rapid adjustment of production to demand changes, and decrease farmers' bargaining power.

Agricultural products produced by many farmers often enjoy a collective reputation. This may lead to market failure because of externalities of farmers' actions. For example, some farmers sell unripe fruit at the beginning of the season. These farmers enjoy high prices but may cause a decline in demand. More generally, without enforcement of quality standards, farmers have an incentive to exploit a joint reputation if they can save costs by producing a lower quality. Additionally, because of the small size of most farming operations, it is difficult for farmers to differentiate higher quality products without cooperation, which may lead to an undersupply of desirable goods. Cooperation of farmers in the setting of quality standards and their enforcement or in the establishment of a collective brand is justified to prevent these market failures (OECD, 2004).

The small size of farming operations and the public goods character of agricultural research will cause an underinvestment in research if there is no cooperation of farmers or government intervention.

These market failures, caused by the special characteristics of agricultural production, are the main justification for a limited antitrust exemption of the agricultural sector. Because of the small size of most farming operations, collaboration enables farmers to exploit size economies and save costs, e.g. by establishing joint packing and storage facilities, joint research and promotion. Without the possibility of farmers' cooperation in the marketing of agricultural products, marketing firms may exploit market power to the detriment of farmers and consumers. Economic theory shows that the outcome of bargaining between two firms can be preferable to the equilibrium of an oligopsonistic market from a welfare point of view (Nash, 1950)<sup>3</sup>. Farmers' cooperation in R&D, production and marketing, facilitated by the antitrust exemption, may be welfare-enhancing, not just for farmers but for the economy as a whole.

# **Agriculture and Antitrust Regulation in Israel**

The Israeli antitrust law exempts the agricultural sector from the prohibition of restrictive arrangements but not from the chapters of the law dealing with mergers and monopolies. A "restrictive arrangement" is defined as an arrangement between two or more persons conducting business that limits at least one party to the arrangement in a manner that may prevent or reduce competition. In addition to a general definition of restrictive arrangements, the Israeli antitrust law includes a number of specific restraints, "the existence of which constitute an irrefutable presumption that damage to competition exists." An arrangement involving a restraint with regard to price, profits, the quantity, quality or type of assets or services in the business, or involving division of the market, is always considered a restrictive arrangement (Restrictive Trade Practices Law 5748 – 1988, Paragraph 2(b)). These are the so-called "hard-core" cartelistic agreements where no further evidence of the damage to competition is necessary. In other cases (e.g. vertical agreements which are not exempted by a statutory or block exemption), a case-specific investigation is necessary to determine whether the agreement will damage competition.

- 3 Kachel and Finkelshtain (2009) quantified these benefits in the case of the Israeli aquaculture sector.
- Israel Antitrust Authority (IAA). Annual Report 2004-05.

  The full definition currently included in the law is "A restrictive arrangement is an arrangement entered into by persons conducting business, according to which at least one of the parties restricts itself in a manner liable to eliminate or reduce the business competition between it and the other parties to the arrangement, or any of them, or between it and a person not party to the arrangement" (Paragraph 2(a)). This definition was deemed too wide by an expert committee appointed by the Minister of Trade, Commerce and Labor in March 2005. The committee proposed an amendment of the definition of restrictive arrangements. In 2005, the IAA distributed a bill to amend the law according to the recommendations of the committee (IAA, 2005) but the change has not yet been incorporated into the antitrust law.

The Israeli antitrust law establishes several statutory exemptions (arrangements which "shall not be deemed restrictive"), two of them relevant to the agricultural sector. The first exemption concerns arrangements "involving restraints, all of which are established by law" (Paragraph 3(1)). This exemption allows Israeli marketing boards to conduct restrictive arrangements as long as these arrangements are explicitly covered by the law governing the marketing board. The second exemption is termed the "agricultural exemption" (Paragraph 3(4))<sup>5</sup>. It permits restrictive arrangements between farmers, between farmers and wholesalers, and between wholesalers for domestic agricultural produce.

What Is the Economic Relevance of the Agricultural Exemption in Israel? "Israeli courts have been consistent in ruling that antitrust exclusions should be interpreted very narrowly" (Strum, 2003). The agricultural exemption is no exception.

One disputed concept of the agricultural exemption is the definition of the products exempted. The law states that agricultural produce from a wide variety of agricultural sectors-encompassing practically all commercial agricultural production in Israel—is exempted but restricts the exemption to produce produced domestically and excludes products manufactured from agricultural produce (see footnote 4). Until recently, Israeli courts had not resolved the question of what kind of treatment constitutes a processing activity that excludes an agricultural product from the exemption. For instance, in the case of a restrictive arrangement between Tnuva, a marketing cooperative owned by cooperative agricultural settlements (Kibbutzim and Moshavim)<sup>6</sup>, and four slaughterhouses, both Tnuva and the slaughterhouses claimed that slaughtered chickens are agricultural produce and that their agreement is therefore exempted. The court order to cease the restrictive agreement was reached in consent with the indicted parties and did not include a decision with regard to the exempted products (IAA, 2003b).

In the case of a restrictive arrangement between producers of frozen vegetables, which included the fixing of selling prices and allocation of customers among the firms, the District Court of Jerusalem (2006) defined two criteria in its verdict for

- The full text of the agricultural exemption (Restrictive Trade Practices Law 5748–1988, **bold** added by authors): 3. Arrangements which are not restrictive ...(4). An arrangement involving restraints, all of which relate to the growing or marketing of domestic agricultural produce of the following kinds: fruits, vegetables, field crops, milk, honey, cattle, sheep, poultry or fish, provided all parties thereto are growers or wholesale marketers of such produce; the above provision shall not apply to goods manufactured from such agricultural produce; the Minister [of Trade and Industry], with the consent of the Minister of Agriculture and the ratification of the Knesset Economic Committee, may, by Order, add or delete types of agricultural produce.
- In 2008, Tnuva was sold and is now a corporate firm.

determining exempted agricultural products: (1) agricultural produce which has been processed in a way that is necessary for its marketing is included in the exemption, (2) if the processing is not necessary for marketing, it is necessary to verify that the processing has not changed the natural state of the agricultural produce, including its physical state, form, taste or the addition of foreign materials. If the produce was changed in such a way, it is no longer "agricultural produce" but a good manufactured from agricultural produce, and as such not included in the exemption. The accused parties appealed the court decision before the High Court of Justice (2007). The High Court of Justice basically confirmed the decision of the lower court. In addition to the two criteria stated above the High Court considers it necessary to examine if the product in question is characterized by seasonality and a short shelf life. According to the High Court, these two characteristics provide the main justification for the agricultural exemption because they necessitate supply management and coordination of marketing.

According to the criteria established by the District Court and the High Court, the definition of "agricultural produce" is very narrow: processed products are only included in the exemption if the processing is essential to enabling their marketing, or if the processing does not change the agricultural product. This excludes even minimally processed products such as cut and pre-packed salad or frozen vegetables from the agricultural exemption, but allows treatments which are necessary for marketing (e.g. washing and packing, treatment and packing of milk).

On the other hand, the Israeli agricultural exemption is wide with regard to the players included. All sides in an arrangement have to be growers or wholesalers of agricultural produce, and all of the restraints have to relate to the growing or marketing of domestic agricultural produce (see footnote 4). Restrictive arrangements between growers, growers and wholesalers, or only wholesalers of agricultural produce are therefore legal and exempted from the prohibition of restrictive arrangements. According to the current legal situation, it is not necessary to make a precise distinction between growers and wholesalers of agricultural produce because both are exempt.

Several times in recent years, in the framework of the "Economic Arrangements Law", a restriction of the agricultural exemption was proposed (e.g. Reich, 2007). The proposed change was not included in the final law because of opposition by farmers' organizations and their representatives in the Knesset. The recurring, albeit unsuccessful attempts to amend the exemption signal the discontent of the Finance Ministry and the Antitrust Authority with the current wide exemption with regard to the players excluded from antitrust scrutiny, as well as the strong opposition to any change from farmers and their representatives. Even a relatively minor change, excluding only wholesalers of agricultural products who

are affiliated with retailers from the exemption, has been strongly objected to (Knesset, 2008).

A restriction of the exemption to growers only would require a definition of who is a grower with respect to restrictive arrangements relating to the growing and marketing of agricultural produce. As cases in point: Is an exporter of agricultural produce who grows part of the produce him/herself a grower (e.g. MTEX<sup>8</sup> for citrus exports)? Or are the regional marketing organizations, owned jointly by Kibbutzim and Moshavim, exempted? As it stands today, processing firms buying agricultural produce from farmers are already not included in the agricultural exemption<sup>9</sup>.

Restrictive arrangements can occur in a wide variety of agreements and arrangements between firms. One way of implementing a restrictive arrangement is to set up a company owned jointly by competitors. An example of this type of restrictive agreement involves the Antitrust Tribunal's indictment of the companies Tnuva and Meir Ezra, both major importers of meat, for implementing a restrictive arrangement by establishing a jointly owned company. This company enabled the competitors to coordinate prices for imported meat and divide the market between them (District Court of Jerusalem, 2001). An example of a company established by two competitors in the market for export services of agricultural produce (mainly citrus fruit) is MTEX. Both parent companies (Mehadrin Ltd. and Tnuport) were major citrus exporters before the establishment of MTEX in 2002. In subsequent years, both companies jointly exported citrus fruit through MTEX, which accounted for about 70% of Israeli citrus exports. In this case, the agricultural exemption enabled two competing companies to export agricultural produce jointly, without a formal merger which might not have been approved by the IAA

- see: Proposed Economic Arrangements Law for 2008.
- MTEX (Mehadrin Tnuport Export (L.P.)): a company exporting mainly citrus fruit, jointly owned by Mehadrin Ltd. and Tnuport until 2006, now fully owned by Mehadrin.
- e.g. in the case of the restrictive agreement between producers of frozen vegetables (District Court of Jerusalem, 3.8.2006) the court determined that firms producing frozen vegetables are not wholesalers of agricultural produce. See also the decision of the General Director of the IAA (19.11.2003) with regard to the request for exemption from approval of a restrictive agreement which was submitted by the processing factories Gat and Ganir. The subject of the agreement between both companies is joint negotiations for a long-term supply contract of citrus fruit from "Mishkei Hevel Aza". The General Director did not grant the requested exemption. This request also demonstrates that processing firms buying agricultural produce from growers are not included in the agricultural exemption. An additional example: slaughterhouses are neither "growers" nor "wholesalers", according to Antitrust Tribunal (2003), Food Club v. the General Director of the Antitrust Authority (Paragraph 139).

because of the high concentration created by the collaboration in the export service market<sup>10</sup>.

In the past, the agricultural sector was characterized by restrictive arrangements and government intervention. The Ministry of Agriculture and the agricultural production and marketing boards were involved in quantitative planning (e.g. production quotas, planting restrictions) of most agricultural sectors, while minimum prices were established for many products. Government-sanctioned export monopolies were responsible for exporting Israeli agricultural produce. Most restrictive arrangements in the agricultural sector were conducted in the framework of statutory marketing boards (e.g. Citrus Marketing Board, Vegetable Production and Marketing Board, Fruit Board). The activities of statutory marketing boards are exempted from antitrust enforcement based on Paragraph 3(1) of the antitrust law (exempting restraints, all of which are established by law), as long as these activities are in the framework of the authorities granted to the particular marketing board by law, which were very wide. At that time, the agricultural exemption (Paragraph 3(4)) was probably mainly relevant to the establishment of restrictive agreements in sectors without statutory marketing boards (e.g. milk, aquaculture).

Since the beginning of the 1990s, the Israeli agricultural sector has undergone far-reaching changes. Direct government intervention in agriculture decreased greatly and is now limited to a few sectors (mainly milk and eggs). The activities of marketing boards were severely restricted. This process began with the liberalization of citrus marketing and continued with the opening of other export sectors to competition. In 2004, the Plant Board replaced four former boards (citrus, fruit, vegetables, flowers). In the new law regulating the Plant Board<sup>11</sup>, the board's authority was restricted relative to the legislation governing the former boards. Much of the authority was transferred to the Minister of Agriculture, e.g. the determination of production levels, conditions for export licenses and rules regulating marketing and price support. The laws governing the four former boards included the explicit possibility of designating a single "monopoly" exporter. Such a paragraph is no longer included in the new law, and the law even determines that one of the considerations in establishing rules for granting export licenses is the efficient and orderly execution of exports, while creating conditions enabling an increase in the number of exporters (Paragraph 31). A major amendment of the new law in 2007<sup>12</sup> once again increased the authority of the Plant Board.

<sup>10</sup> In November 2006, the IAA (2006) approved a formal merger and MTEX is now fully owned by Mehadrin Ltd.

<sup>11</sup> Plant Board Law-1973 (the new law is based on the law which governed the former Fruit Board).

<sup>12</sup> Plant Board Law (Amendment No. 8)–2007.

According to the amended law, the authority to regulate the market was transferred from the Minister of Agriculture to the board, which can now establish marketing quotas, quality standards and additional restrictions with regard to marketing, all of which have to be approved by the minister. Board activities designed to support prices in the form of minimum prices, financial support, or the buying of surpluses can only be approved by the Minister of Agriculture after consultation with the Minister of Finance. Decisions on production restrictions and conditions for export licenses remain the responsibility of the Minister of Agriculture.

The Plant Board is currently using only a small part of its authority. The board's budget has been cut several times, and the flower sector has even decided to terminate its participation in the Plant Board. Nevertheless, the Plant Board law provides a framework for restrictive arrangements in the horticultural sector which may be used, for instance, to restrict production or stabilize prices by removing quantities from the market. The Minister of Agriculture has to set up the most restrictive agreements but the recent change in law has increased the board's power substantially. The horticultural sector is one of the main sectors in Israeli agriculture, and fruit, vegetable and flower production account for about half of the agricultural output value (CBS, 2008). Additional statutory marketing boards exist for poultry (17% of the agricultural output value), groundnuts, olives, and a few processed agricultural products (products from citrus, maize and tomatoes). Thus, about 70% of agricultural production in Israel is governed by statutory marketing boards, which enable the establishment of restrictive arrangements authorized by their respective laws, independent of the agricultural exemption<sup>13</sup>.

Other agricultural sectors do not have statutory marketing boards; examples are the milk sector and the aquaculture sector. The Israeli Dairy Board is a private company, jointly owned and managed by the government, producer organizations and dairy companies. The dairy industry is characterized by allotment of production quotas to producers and the payment of a guaranteed price for milk not exceeding the quota. This policy is partly based on laws and official regulations (Control on Commodities & Services (Milk Production) - 1967; Israeli Dairy Sector Planning Law – 1992), and partly enabled by the agricultural exemption.

Aquaculture producers jointly marketed their production for decades. The collective marketing was organized by the Fish Growers Organization, a voluntary growers' organization including most aquaculture producers<sup>14</sup>. The organization fixed yearly marketing quotas based on historical production and expected

<sup>13</sup> The flower sector (about 5% of agricultural production) is no longer included in the Plant Board, but the law includes provisions to enable re-integration of the flower sector into the board.

The main aquaculture producers in Israel are Kibbutzim (collective settlements), and about 40 Kibbutzim account for most of the production.

demand. The agricultural marketing cooperative Tnuva supplied marketing services on a commission basis, while the growers' organization was in charge of price setting and accounting. The collective marketing was terminated in 2000, after some large growers decided to market independently. A study of the aquaculture sector (Kachel and Finkelshtain, 2006 and 2009) shows that production quantities in the aquaculture sector, despite being organized like a cartel, approximated a competitive equilibrium. In addition, the results indicate that collective marketing provided fish farmers with bargaining power and increased farmers' prices, compared to recent years without collective marketing.

The agricultural exemption in the Antitrust Law supplied the legal basis for the joint marketing of fish by aquaculture producers. In the avocado sector as well, growers probably manage to increase their bargaining power with the help of the cooperation enabled by the exemption. About 70% of the avocado growers are organized through their packinghouses (most but not all of them cooperatives) in the Avocado Growers' Union. The union is responsible for overseeing avocado exports of its members through Agrexco, a former export monopoly for fruit (not including citrus) and vegetables<sup>15</sup>. Other sectors rely on the agricultural exemption to coordinate marketing (apples, bananas) or to eliminate surpluses (potatoes, carrots). These arrangements usually also include marketing companies that are not owned by growers.

Proponents of the agricultural exemption may argue that it enables the coordination of agricultural exports to avoid competition among Israeli exporters in export markets and increase export revenues and domestic welfare. For most export products, Israel's market share in export markets is small. Thus, the possibility of exercising market power and influencing prices in export markets is probably very limited. A study (Kachel, 2003) investigating market power for Israeli citrus exports in the decade before export liberalization found high residual import demand elasticities for Israeli citrus fruit in main markets. In addition, the Citrus Marketing Board did not exploit the limited potential to exercise market power. However, market power in export markets for avocado was successfully exercised before and after liberalization of avocado exports (Dvir, 2007). Yet, there is no other export sector with high market shares for Israeli produce similar to the avocado sector. In addition, in sectors with export companies that are not owned by growers, an increase in export revenues is likely to increase exporters' profits and not trickle down to growers.

Moreover, statutory marketing boards exploit the agricultural exemption for restrictive arrangements organized with their help but not fully covered by their

<sup>15</sup> Dvir (2007) analyzed avocado price transmission in exports and found weak evidence for asymmetric price transmission benefiting Agrexco.

legal authority. For example, surplus removal organized by the Poultry Board included arrangements among wholesalers enabled by the agricultural exemption. Similar activities were performed by the Plant Board. It seems that the recent change in the Plant Board law will enable such arrangements in the fruit and vegetable sector within the framework of that law, without reliance on the agricultural exemption.

The examples presented above involve arrangements to increase or stabilize prices which are perceived to be important by growers. This is probably why growers and their representatives oppose a more limited exemption. It seems that the danger of losing this possibility of stabilizing grower prices is feared more than the danger of the exemption being exploited by wholesalers to the detriment of growers. It is difficult to analyze the competitiveness of the marketing sector because for most products, there are no available data on growers' prices, and only a few studies have been performed. An analysis of the market for citrus export services indicated that a high concentration in the export sector, together with imperfect information of growers with regard to prices, enabled noncompetitive behavior of exporters, with a detrimental effect on grower prices (Kachel et al., 2004).

Similar to other industrialized countries, Israel is experiencing an increase in the concentration and market power of the retail sector (see for example IAA, 2003a) but the market share of supermarket chains is still relatively low compared to most European countries and the US. According to a decision made by the IAA General Director in 2001<sup>16</sup>, the market share of grocery retail chains in that year was estimated at over 50%, as opposed to approx. one-third in 1994. Recent data indicate that in 2007 consumers spent 56% of their retail expenditure for food in stores of supermarket chains (CBS). However, the market share of retail chains is much lower for fresh fruit and vegetables, which account for a large part of the agricultural produce benefiting from the agricultural exemption. In 2007, about 40% of fresh fruit and vegetables were sold by supermarkets, while traditional fruit and vegetable shops and open markets accounted for most of the rest (CBS). An analysis of retail market margins and price transmission for fresh vegetables by Chudakova (2007) provided no evidence for noncompetitive behavior of supermarkets. Absolute retail marketing margins for 11 vegetables did not increase over a period of 8 years, despite the increase in retail concentration. In addition, changes in retail prices corresponded very closely to changes in wholesale prices. An econometric analysis of price transmission with monthly and weekly data did not find evidence for asymmetric price transmission benefiting supermarkets.

The objection of the General Director to the merger between Blue Square Israel Ltd. and Yarkon (plus 2000) Wholesale Foods Ltd., 2001, Antitrust 3012217 (cited in IAA, 29.5.2003).

Nevertheless, large supermarket chains could potentially exploit their market power versus consumers as well as suppliers. Despite being excluded from the agricultural exemption, some of the supermarkets own wholesale companies and may therefore indirectly benefit from the agricultural exemption. According to a statement of a representative of the Ministry of Agriculture at a Knesset Economic Committee Meeting, the Ministry of Agriculture asked the IAA to investigate why retail prices had not declined proportionally to wholesale prices during a crisis in the stone fruit sector in 2004 and 2005. The General Director of the IAA explained that the IAA cannot investigate this case because the main retail chains have daughter companies that are wholesalers of agricultural produce and are therefore exempt from the scrutiny of the antitrust authority (Knesset, 2008).

The far-reaching changes in agricultural production and marketing (including the decrease in government involvement in the agricultural sector, the development of exports by private commercial firms and the increase in retail concentration) very likely increased the economic impact of the agricultural exemption, as the scope for its exploitation is now much wider. Despite these changes, the agricultural exemption was not amended.

# Agriculture and Antitrust Regulation in the EU

EU antitrust<sup>17</sup> regulation comprises EU legislation and legislation of the EU member countries. The EU legislation applies when an antitrust case affects (or is expected to affect) trade among member countries. If the influence is restricted to one member state, the law of the member state applies. However, this trans-border "effect on trade" is broadly interpreted, and companies generally must comply with both EU competition laws and national laws. In the event of a conflict between these laws, EU competition laws prevail (Esposito, 1999; Tancs, 2000). In some member states, antitrust exemptions dealing with the agricultural sector are very similar to the agricultural exemption in the EU legislation<sup>18</sup> (see, for example, the antitrust exemption for the agricultural sector in the UK<sup>19</sup> and the German<sup>20</sup> antitrust law). In other countries, despite differences, the legislation is quite similar with regard to permitted and prohibited practices (Bergman, 1997). Thus, the analysis in this paper will focus on the EU agricultural exemption and its interpretation in EU case law.

- 17 In the EU, antitrust regulation is termed competition regulation.
- 18 Regulation no. 26 applying certain rules of competition to production of and trade in agricultural products (OJ P 30, 20.4.1962, p. 993).
- 19 Competition Act 1998, Schedule 3-General Exclusions.
- 20 Gesetz gegen Wettbewerbsbeschränkungen, Paragraph 28.

Articles 81 and 82 of the treaty founding the European Community<sup>21</sup> established antitrust rules governing trade among EU member countries. Article 81 prohibits agreements and concerted practices which have as their objective or effect the restriction of competition, while Article 82 prohibits the abuse of a dominant position. A regulation dealing with merger control in the EU (Reg. 4064/89) entered into force in 1990.

The treaty already included a special reference to agriculture with regard to competition policy. According to Article 36, the rules governing competition policy apply to the agricultural sector only as far as will be decided by the European Council. The European Council established special rules for the agricultural sector in 1962 (Reg. 26/1962)<sup>22</sup>. According to Regulation 26/1962, the provisions of the treaty dealing with competition also apply to agricultural products<sup>23</sup>, with the exception of certain restrictive arrangements. These are defined in Article 2(1) of the regulation as arrangements that:

- (1) form an integral part of a national market organization, or
- (2) are necessary for attainment of the objectives set out in Article 33 of the treaty.
- (3) "In particular, it [Article 81(1) of the treaty prohibiting restrictive arrangements] shall not apply to agreements, decisions and practices of farmers, farmers' associations, or associations of such associations belonging to a single Member State which concern the production or sale of agricultural products or the use of joint facilities for the storage, treatment or processing of agricultural **products**, and under which there is no obligation to charge identical prices, unless the Commission finds that competition is thereby excluded or that the objectives of Article 33 of the Treaty are jeopardized" (authors' emphasis in bold).

Like in Israel, the agricultural exemption in the EU regulation just concerns restrictive arrangements but does not relate to monopoly and merger regulation. With regard to merger regulation this is exemplified by the merger case of the Dutch dairy cooperatives Friesland Foods and Campina. The cooperative nature of

- Consolidated version of the treaty establishing the European Community, 24.12.2002.
- 22 In 2006, Regulation 26/1962 was repealed and replaced by Regulation 1184/2006. This change was purely technical - the original regulation was codified to include amendments (despite being amended just once in 1962). Since then, market organisations of single sectors were replaced by the common organisaton of agricultural markets. Regulation 1234/2007 establishing a common organisation of agricultural markets (Single CMO Regulation) now includes the agricultural exemption for sectors falling under the scope of the regulation (Article 176). Other agricultural products are exempted by Regulation 1184/2006.
- 23 The definition of agricultural products of the EU is relatively wide. According to Article 32 of the Treaty: 'Agricultural products' means products of the soil, of stockfarming and of fisheries and products of first-stage processing directly related to these products. An appendix to the treaty lists all 'agricultural products'.

both companies did not play any role in the decision of EU competition authorities to approve the merger, subject to several conditions to resolve competition concerns (European Union, 2008).

The main motivation for the special treatment of the agricultural sector with regard to competition policy was the concern that the Common Agricultural Policy (CAP) of the European Community would be in conflict with competition rules. Regulation 26/1962 was primarily established to enable implementation of the CAP (Esposito, 1999; see also introductory paragraphs of Regulation 26/1962). The European Commission, subject to review by the court, has the sole power to determine if a restrictive arrangement in the agricultural sector fulfills the provisions specified in Article 2(1) of Regulation 26/1962. Competition infringements are handled by the Directorate-General for Competition of the European Commission. Its decisions can be appealed before the Court of First Instance and subsequently before the European Court of Justice (Buccirossi et al., 2002).

The Commission and European courts interpret the exemption granted to the agricultural sector narrowly. The first exemption relating to restrictive arrangements that form part of a national market organization was applied just once: the Commission decided in 1988 that the organization of the new potato sector in France is a national market organization and as such exempted from the prohibition of restrictive arrangements (Commission Decision "New Potatoes", 1988). After the establishment of the European Community, national agricultural policies and market organizations were replaced by the CAP and Common Market organizations, and therefore the first exemption is only barely relevant. There is not a single case in which the second exemption served as justification for a restrictive arrangement in the agricultural sector. The Commission presumes that arrangements established by the CAP are the tools to accomplish the objectives stated in the treaty, and no private restrictive arrangements between farmers or farmers' organizations are necessary in this regard (OECD, 2004; Esposito, 1999).

Only in 1995, a court decision established that the third exemption (named the "cooperative exemption") can justify a restrictive arrangement in agriculture on its own, unrelated to the first two exemptions (Esposito, 1999; see also Paragraph 55, Commission Decision Meldoc, 1986). The "cooperative exemption" may assist EU farmers in their efforts to organize the joint growing, marketing or processing of their products. This cooperation usually takes place in the form of cooperatives (even though the regulation does not mention the word "cooperative"), and enables restrictive agreements among farmers or farmers' organizations. The economic relevance of the "cooperative exemption" appears to be limited (OECD, 2004; Bundeskartellamt, 2003). It allows farmers and their organizations to implement restrictive arrangements, but under several limitations. Regulation 26/1962

includes several provisions restricting the scope of the exemption. One of them stipulates that the exemption does not sanction restrictive arrangements which include an obligation to charge identical prices. This prohibition does not relate to the collective marketing of agricultural products carried out by a cooperative, but restricts price fixing, e.g. among farmers' associations (OECD, 2004; Commission Decision French Beef, 2003, Paragraph 137). Additional provisions allow the European Commission to intervene if the restrictive arrangement excludes competition or jeopardizes the CAP objectives stated in the treaty.

In addition, the exemption limits the parties to a restrictive arrangement that includes only farmers, farmers' associations (e.g. cooperatives) or associations of such associations (e.g. secondary cooperatives) belonging to a single member state. A restrictive arrangement which includes a party which is not a farmer or a farmers' association is not exempted (see Commission Decision Meldoc, 1986, Paragraph 55; Commission Decision Milchförderungsfond, 1985, Paragraph 22). Agricultural cooperatives can benefit from the exemption and use restrictive arrangements with little fear of antitrust enforcement, e.g. they may obligate their members to sell (or buy) agricultural products exclusively through the cooperative and pay a fee when withdrawing from the cooperative. Such an arrangement is legal for farmers' cooperatives as long as competition in the market for the agricultural product is not excluded. For non-farmer cooperatives (or for nonagricultural products), an exclusivity clause has to be beneficial economically and essential for reaching those benefits while not eliminating competition in a substantial part of the market (Commission Decision Rennet, 1980).

Despite the "cooperative exemption", a farmers' cooperative is not allowed to operate restrictive arrangements involving non-farmers. A case in point is the Commission Decision (1988) against the Dutch flower auction VBA. The VBA rented "processing rooms" on its premises to flower traders while restricting the use of those rooms with regard to flowers not purchased through the VBA. These restrictions, despite being established by a farmers' cooperative, were not exempted from the prohibition of restrictive agreements, because they involved an agreement between the cooperative and non-farmer flower traders.

Proponents of the wide agricultural exemption in Israel may argue that the CAP restricts competition in EU agriculture and provides income support and price stabilization, such that there is little scope for an agricultural exemption. The agricultural policy of the EU encompasses most agricultural sectors in the EU<sup>24</sup>.

Measures adopted in the framework of this policy pursue the objectives established in Article 33(1) of the treaty: (a) to increase agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production and the optimum utilisation of the factors of production, in particular labour; (b) thus to ensure a fair standard of living for the agricultural community, in particular by

Despite substantial changes (notably the shift from market price support to decoupled direct aids), support to agricultural producers is still high, accounting for 29% of gross farm receipts in 2005-2007 (measured as Producer Support Estimate (PSE); OECD, 2008). Although the share of the most distorting types of support (based on commodity output and non-constrained variable input use) had fallen substantially, it still accounted for 48% of total support in 2005-07. Israel grows mainly horticultural crops, in addition to dairy and poultry production. It should be noted that support for the EU horticultural sector has been consistently much lower than support for other agricultural sectors, notably grains, dairy and sugar<sup>25</sup>. Since 1996, EU support for the fruit and vegetable sector has been based mainly on the support of producer organizations in the form of "operational funds" and on subsidies for some fruit and vegetables supplied to the processing industry (mostly for citrus fruit and tomatoes). The reform of the fruit and vegetable sector in 1996 replaced a policy of market price support relying on intervention purchases and export refunds. The latest reform of the fruit and vegetable sector (Regulation 1182/2007)<sup>26</sup> eliminates processing subsidies, strengthens producer organizations by increasing the co-financing of operational funds in areas with low organization, and entrusts producer organization with "crisis management" (European Commission, 2007a). Operational funds are co-financed by the EU<sup>27</sup> and can be used by producer organizations for investments in production and marketing facilities and activities. The reform enables producer organizations to spend up to one-third of the operational fund on various measures of crisis management (e.g. green harvesting or non-harvesting, promotion, harvest insurance, market withdrawal). Under certain circumstances, rules established by producer organizations may be extended by the relevant member state to producers in the same geographical area which are not members of the producer organization (Reg. 1234/2007, Article 125f). In 2004, 34% of fruit and vegetables in the EU (25 member states) were marketed by producer organizations but the share of the

increasing the individual earnings of persons engaged in agriculture; (c) to stabilise markets; (d) to assure the availability of supplies; (e) to ensure that supplies reach consumers at reasonable prices.

- 25 The EU budget spent in 2007 on the Common Market Organization in the fruit and vegetable sector amounted to 1.25 billion Euro, about 2.5% of the value of production of the sector. In comparison, the total budget of the EU for the agricultural sector (not including rural development measures) accounted for about 12.5% of the value of agricultural output. There was no financial support for flower production; the olive oil and wine sectors were supported by separate schemes (EU, 2009).
- 26 In 2008, Regulation 1182/2007 regulating the fruit and vegetable sector was incorporated into Regulation No 1234/2007 establishing a common organisation of agricultural markets (Single CMO Regulation).
- 27 The EU generally co-finances operational funds by 50%, up to 4.1% of the value of the marketed production of each producer organisation.

producer organizations was very different among member states. In Belgium and the Netherlands, about 80% of fruit and vegetable production was marketed by producer organizations, while there were hardly any producer organizations in some of the new member states. A main objective of the EU policy in the fruit and vegetable sector is to increase supply concentration by farmers' organizations in light of increasing concentration of the wholesale and retail trade (European Commission, 2007a).

The EU policy in the fruit and vegetable sector provides active support for the establishment of farmers' organizations, whose operations may be facilitated by the "cooperative exemption" from restrictive arrangements in Regulation 26/1962. In addition, it allows for the establishment of "Interbranch organizations" in the fruit and vegetable sector. These organizations can also include non-farmers, e.g. trader and processing company representatives, and may establish certain rules concerning production and marketing (e.g. agreements relating to the choice of seeds, dates for the commencement of harvesting, minimum quality and size requirements). Additional activities carried out by Interbranch organizations include the provision of information, the improvement of product quality and the promotion of environmental friendly production methods. Interbranch organizations are not allowed to be actively involved in production or marketing. They are explicitly exempted from the prohibition of restrictive arrangements, but their authority is limited to agreements compatible with the objectives stated in the regulation, and after notification to the European Commission (Reg. 1234/2007, Articles 123(3)(c), 176(a)). Certain types of agreements may be extended to nonmembers in the same region (Reg. 1234/2007, Article 125(1)-(m)). In addition to restricting the scope of agreements, the regulation includes a list of agreements which in any case will not be exempted, including price-fixing and market partitioning agreements. It is therefore likely that Interbranch organizations do not pose a threat to competition (OECD, 2004). There are just eight Interbranch organizations in the EU (European Commission, 2007b).

Despite the "cooperative exemption" and EU involvement in agricultural markets, the EU policy does not intend to allow producer organizations to establish market power and impair competition. On the contrary, "the maintenance of effective competition on the market for agricultural products is one of the objectives of the common agricultural policy and the common organisation of the relevant markets" (Court of Justice, 2003, Paragraphs 57-60). In the decision with regard to the UK farmers cooperative "Milk Marque", the European Court of Justice confirmed the authority of national antitrust enforcement to intervene if a farmers' cooperative exploits market power in the domestic market.

To summarize, the economic relevance of the agricultural exemption in the EU is quite limited, despite also including agricultural products from first-stage processing and encompassing arrangements related to production, marketing and processing of these products. This is mainly because only farmers and their associations can invoke the exemption. In addition, the scope of the exemption is limited, so as not to exclude competition or jeopardize the objectives of the CAP.

# Agriculture and Antitrust Regulation in the US

Antitrust regulation in the US is based on three laws, the Sherman Act (1890), the Clayton Act (1914) and the Federal Trade Commission Act (1914). The Sherman Act prohibits restrictive arrangements (Section 1) and the abuse of a dominant position (Section 2). The Clayton Act deals with specific restrictive agreements (including price discrimination, tie-in sales, and exclusive dealing arrangements) and mergers, while the Federal Trade Commission Act outlaws unfair and deceptive methods of competition and establishes the Federal Trade Commission as an antitrust enforcement agency. The general language of the Sherman Act created the need for interpretation, and courts adopted the rule of reason and the rule of per se illegality. The application of the rule of reason often requires extensive economic analyses on a per case basis to decide if an arrangement restricts competition. On the other hand, certain types of agreements (notably price fixing and market division) were found to be so anticompetitive that they were declared to be illegal per se, without requiring further investigation<sup>28</sup>. This created a problem for farmers organized in cooperatives because the collective selling of products could be interpreted as an agreement on prices, which is illegal per se (Frederick, 1989; see also April v. National Cranberry Association, 1958).

The Capper-Volstead Act (1922) provided the necessary statutory protection for agricultural cooperatives<sup>29</sup>. This act grants associations of producers of agricultural products limited exemption from antitrust legislation for "collectively processing, preparing for market, handling, and marketing" agricultural products if they fulfill the following conditions: (a) only agricultural producers are members of the association; (b) voting shall not be based on ownership share in the association<sup>30</sup>, or otherwise, a limitation of the dividend paid to a maximum 8% of

<sup>28</sup> This is similar to the distinction made in the Israeli antitrust law which singles out special types of agreements in Paragraph 2(b) as "restrictive arrangements".

<sup>29</sup> The Clayton Act already included an exemption for agricultural organizations instituted for the purpose of mutual help, but this exemption was limited to non-profit organizations without capital stock, and did not state the activities that such an organization could perform (Clayton Act, Section 6).

<sup>30</sup> The common statement that the Capper-Volstead Act requires a one-member, one-vote rule is not correct, because not only is voting restriction an option (the other option is

the ownership capital per year; (c) at least 50% of the value of products marketed by the association has to be products of members, and (d) the association operates for the mutual benefit of its members as agricultural producers.

The law does not explicitly require farmers to organize into a cooperative; however, the cooperative organizational form suits the conditions required by the law. Farmers who organize according to the law may, in the framework of the cooperative, agree on prices and sales conditions, cooperate with other agricultural cooperatives, and occupy a substantial market share without violating antitrust law. The Capper-Volstead Act explicitly allows agricultural cooperatives to establish joint marketing agencies (Cobia, 1989; Frederick, 1989; Volkin, 1985).

The Capper-Volstead Act only protects agricultural cooperatives that limit their membership to farmers or organizations of farmers. A farmer is someone performing farming activities, such as growing crops or raising animals. A landowner renting land to farmers is only considered an agricultural producer if his/her rent is a portion of the crop or its sales proceeds. He/She is not considered a farmer if he/she receives a flat rental fee for the land. US case law supplies additional insights which define the limits of membership in an agricultural cooperative enjoying Capper-Volstead protection. For example, non-cooperative firms that pack or process agricultural products may be members in a cooperative if the firm devotes a substantial portion of its resources to agricultural production. Even a corporate firm with only modest agricultural production can be a member of a cooperative if its role in the cooperative is limited to the extent of its own production and in relation to its production activity. However, if a non-cooperative firm solely engaged in packing or processing agricultural products is accepted as a member, the exemption is lost<sup>31</sup>. A related requirement is the need to revoke membership from members who are no longer producers or who have stopped marketing products through the cooperative (Frederick, 1989). The act's requirement that the activity of the cooperative be for the mutual benefit of members as producers prevents misuse of the exemption by members for restrictive arrangements not related to their agricultural production.

The Capper-Volstead Act protects the collective action of farmers in processing and marketing their agricultural products. The term "marketing" is interpreted widely by US courts as including all activities necessary to move goods from producer to consumer (e.g. buying and selling, storing, transporting, standardizing,

restriction of the amount of dividends), but patronage-based voting is not prohibited (Cobia, 1989).

See Case-Swayne Co. v. Sunkist Crowers, Inc. 389 U.S. 384 (1967); United States v. National Broiler Marketing Association, 436 U.S. 816 (1978); Northern California Supermarkets v. Central California Lettuce Producers Cooperative, 413 ESupp. 984 (N.D.Cal. 1976). affd. 580 F2.d369 (9th Cir. 1978). cert. denied, 439 U.S. 1090 (1979), all cited in Frederick (1989).

financing and supplying market information; see Frederick, 1989). The protected collective action of an agricultural cooperative can be minimal; for example, it can only involve information sharing or collective bargaining. On the other hand, there are large, vertically integrated cooperatives dealing with every aspect of marketing and providing consumer-ready agricultural products directly to retailers. Examples are Ocean Spray, a cooperative that processes and markets juices, which unites more than 800 cranberry and grapefruit growers, and Blue Diamond, a cooperative of about 3000 almond growers in California. A cooperative may restrict the quantity it accepts from members for marketing. The cooperative may not be used to restrict production by members, but it is permitted to provide information to members suggesting that they produce less (Frederick, 1989).

Farmers' associations may even, in the framework of a single cooperative or resulting from cooperation among cooperatives, develop a dominant supply position in a market without being challenged by antitrust authorities. The conditions are that the cooperation be voluntary and that the dominant position be achieved without resort to noncompetitive conduct vis-à-vis competing firms. Cooperatives are not exempted from merger supervision, but mergers of cooperatives are rarely challenged and are commonly considered to be protected under the Capper-Volstead Act. Acquisitions of non-cooperative firms by a cooperative are not exempt and are subject to regular merger supervision (Frederick, 1989; Crespi and Sexton, 2003).

Similar to the EU agricultural exemption, the Capper-Volstead Act also includes a provision allowing intervention when an association exercises market power "to such an extent that the price of any agricultural product is unduly enhanced" (Capper-Volstead, Section 2). The Secretary of Agriculture is authorized to enforce this provision, in contrast to the EU where the comparable safeguard is enforced by the Directorate-General for Competition of the European Commission or by national competition authorities. It is likely that supervision by the minister responsible for agriculture will be more lenient than that by competition authorities. According to Carstensen (2003) and Crespi and Sexton (2003), the Secretary of Agriculture has never enforced this provision. However, the US courts also consider themselves authorized under the act to prevent abuse of the exemption (Reich, 2007).

Several studies have attempted to measure the effect of cooperatives on market performance. The evidence from most of these is inconclusive with regard to the cooperatives' ability to exercise market power and increase prices for their products (see for example Wills, 1985; Petraglia and Rogers, 1991; Haller, 1992), with the exception of cooperatives in the US dairy sector. According to Masson and Eisenstat (1980) and Madhavan et al. (1994), US dairy cooperatives succeeded in raising retail fluid milk prices by using price discrimination in the years before 1975.

Estimating the US cooperatives' exercising of market power is complicated by the fact that many fruit, vegetable and milk markets are additionally regulated by marketing orders. The establishment of a marketing order may enable producers of a specific product in a specific geographical region to organize as a cartel. The legal basis of marketing orders is the Agricultural Marketing Agreement Act (AMAA) from 1937. This act provides for four types of actions: (a) generic promotion and advertising, (b) R&D, (c) establishment of standards with regard to product quality and required packaging, and (d) restrictions on the quantities of a product sold (Powers, 1990).

Marketing orders, once adopted by grower referendum and approved by the Secretary of Agriculture, are binding for all growers and handlers of the product, and thus eliminate the "free-rider" problem experienced by cooperatives. A sector organized in a marketing order is not allowed to agree on selling prices but the AMAA provides several quantity restrictions which may be used to exercise monopoly power and increase grower prices. The use of quantity restrictions has to be approved by the Secretary of Agriculture. Quantity restrictions have been challenged in the past (e.g. suspension of the California-Arizona lemon order, Richards et al., 1996; opposition of the US Department of Justice to a marketing order restricting hop supply, DOJ, 2004). At present, only 12 out of 32 federal marketing orders in the horticultural sector are authorized to use volume controls, and not all of them actually use them (USDA-AMS, 2009). A more critical attitude towards the use of quantity restrictions is probably one reason for the decrease in the number of marketing orders observed in the last two decades<sup>32</sup>.

In any event, despite the binding nature of regulations drawn up by a marketing order and approved by the Secretary of Agriculture, there are several factors that limit the potential of marketing orders to exercise market power. We have already mentioned one factor—the unpopularity of volume controls. In addition, regardless of the binding nature of the regulation, growers and handlers may be cheating. Approval by the Secretary of Agriculture has to be renewed yearly and cannot be regarded as assured. An increase in grower prices realized by volume controls has the potential to stimulate entry, which orders are not allowed to prevent. If volume controls are used to provide relief in a structural oversupply situation, this relief will only postpone the inevitable restructuring (Crespi and Sexton, 2003). This may be the reason why empirical studies of market orders often fail to detect cartel-like behavior (e.g., Thompson and Lyon, 1989 for California-Arizona navel oranges, French and Nuckton, 1991 for California raisins and Richards et al., 1996

<sup>32</sup> In the 1980s, there were 42 marketing orders for fruit, vegetables and specialty crops (Powers, 1990).

for California-Arizona lemons)<sup>33</sup>. Richards et al. even provide evidence for an increase in marketing margins for lemons during periods of volume-control suspension, resulting from the exercising of monopsony market power by distributors and retailers. A study by Crespi and Chacón-Cascante (2004) showed that the California Almond Marketing Board exploits only about one-third of its potential market power, despite supplying more than 95% of the US almond market and approx. two-thirds of the world almond market. This suggests that other marketing orders with smaller market shares will be even less likely to exploit a significant amount of market power<sup>34</sup>.

Presently, most marketing orders appear to be focused on collective action deemed to be beneficial to all growers in a sector (e.g. R&D, generic promotion and quality standards which may decrease transaction costs and allow product differentiation) but difficult to organize voluntarily because of the free-rider problem. Contrary to the EU, there has been little sector-specific support to the US fruit and vegetable sector, with most budget outlays stemming from a variety of general, noncrop-specific programs, e.g. disaster payments, subsidized crop insurance, export promotion, and food purchase and donation programs (Lucier et al., 2006; USDA-ERS, 2009a, b).

To summarize, the Capper-Volstead Act and its interpretation by US courts enable far-reaching cooperation of farmers in the form of cooperatives. Farmers' cooperatives in the US may dominate a market without being challenged by antitrust authorities. There are several factors mitigating the power of cooperatives to act as cartels, e.g. the free-rider problem and the inability to restrict supply. Market orders have the legal authority to overcome the free-rider problem, but share some of the difficulties of cooperatives in exercising market power. Today, market orders focus less on volume control and more on R&D, generic promotion and quality standards.

# A Comparative Analysis of Antitrust Regulation in the Agricultural Sector in Israel, the US and the EU

In this section, we perform a comparative analysis of antitrust policy in the agricultural sector in Israel, the US and the EU, based on the description of these

- 33 There are also studies asserting the exploitation of market power by marketing orders, e.g. Powers' (1992) investigation of the California-Arizona navel orange order found that this order successfully exercised some market power in allocating oranges between fresh and processed uses.
- 34 According to Crespi and Sexton (2003), "Beyond milk and, to a lesser extent, navel oranges, there is very little evidence of market power achieved through marketing orders".

policies presented in the previous chapters. The analysis focuses on two related aspects: the scope of the legal exemption and its economic relevance. The economic relevance of the exemption is a function of its scope but also depends on additional institutions replacing the "need" for restrictive arrangements in the framework of the exemption.

Table 1 presents a comparison of the scope of the agricultural exemption. Arrangements restricting competition concerning activities, products and types of firms included in the table are not prohibited.

Table 1: A comparison of the scope of the "agricultural exemption" in Israel, the EU and the US

	Israel	European Union	United States
Activities included in the exemption	production, marketing	production, sales, use of joint facilities for storage, treatment or processing	processing, preparing for market, handling and marketing
Exempted products	agricultural produce, does not include processed products (tendency to narrow interpretation)	all agricultural products included in Appendix 1 of the EU treaty, including many processed products	agricultural products are not specified, include fresh and processed agricultural products
Exempted firms	farmers and wholesalers	farmers, farmers' associations	farmers, farmers' associations
Limitations	no possibility of prohibiting restrictive agreement if competition is severely limited or excluded	prohibition of arrangements that exclude competition or jeopardize the objectives of the CAP	farmers' associations have to fulfill certain conditions; Secretary of Agriculture can intervene if prices are "unduly enhanced"

The main difference between Israel and the antitrust exemptions in the US and EU is the type of firms which can participate in a restrictive arrangement in the agricultural sector. In Israel, farmers and wholesalers of agricultural produce are exempted, while in the other countries, only farmers and their associations are allowed to set up competitive restraints. The exemption in Israel allows wholesalers to participate in restrictive arrangements with farmers, or even conclude restrictive arrangements among themselves. The rationale for this wide exemption lies in the purpose of the legislation. The first antitrust law legislated in Israel in 1959 already contained an "agricultural exemption". During the debate over the proposed law, the finance minister at the time, Levi Eshkol, explained that for most agricultural produce, rapid marketing is a necessary condition, and therefore the marketing has to be organized in a cartel (District Court Jerusalem, 2006). This explains the rationale of the legislator: because most agricultural products are perishable, resulting in very inelastic short-term supply, the exemption is needed to enable farmers to coordinate production and marketing and thus to avoid surpluses and price instability. At that time, a large part of the agricultural production was marketed by cooperatives established by agricultural cooperative settlements. The wide agricultural exemption facilitated effective volume controls by permitting sector-wide arrangements, including agricultural marketing cooperatives and private wholesalers<sup>35</sup>.

In contrast, the purpose of the agricultural exemptions in US and EU legislation is different. In the US, the agricultural exemption was necessary to resolve a discrepancy between the interpretation of antitrust legislation and the functioning of cooperatives. Its main objective is to enable growers to establish cooperatives for collectively processing and marketing their products. The main objective of the EU exemption is to prevent legal conflicts between the CAP and competition policy, and, in addition, to provide farmer cooperatives with some leeway in the organization of their relationship with members and in their cooperation with other farmers' cooperatives. Both the EU and the US recognize the important role farmer cooperatives can play in concentrating supply, enabling farmers to process and market their products by themselves, and improving their bargaining power in an oligopsonistic market. However, it was not the intention of the US or the EU legislators to enable sector-wide cartels of farmers and marketers in order to regulate supply. So there was no "need" to include wholesalers in the exemption.

Additional differences between the exemptions in Israel, the US and the EU are related to the different purposes of the regulations. With regard to the exempted products and activities, the Israeli exemption is much narrower than its

<sup>35</sup> The original exemption even included retailers. Retailers were removed from the exemption in 1963.

counterparts in the US and EU. The included products in Israel encompass mainly fresh, unprocessed or minimally processed products. The exempted agreements have to relate exclusively to the production and marketing of agricultural produce, and do not include agreements relating to product processing, or those related to processed agricultural products. Treatment or processing is only allowed if it is essential for marketing the agricultural product, or if it does not change the agricultural product. Because the main objective of the exemption was to enable sector-wide coordination of production and marketing of perishable agricultural produce, agreements relating to processing or processed agricultural products are not included. On the other hand, the agricultural exemptions in the EU and the US are designed to facilitate the organization of farmers for collective processing and marketing of their products—therefore processed products and agreements related to processing are included in the exemption.

The limitations placed on the exemption of farmers' restrictive arrangements in the EU and US are also explained by the intentions of the legislators: both exemptions include a safeguard which enables the authorities to intervene if the restrictive arrangement creates a farmers' cartel which may cause a substantial increase in consumer prices and a decline in welfare. In Israel, the intention of the legislator was to enable sector-wide coordination of quantities; therefore, no such safeguard was included in the law.

To summarize, the agricultural exemption in Israel is relatively narrow with regard to the range of products and activities exempted, compared to the parallel exemptions in the EU and US, but much wider with regard to the firms which can be party to a restrictive agreement. In Israel, deregulation of the agricultural sector and a decline in market regulation by marketing boards seem to have increased the significance of the exemption, enabling restrictive agreements in the agricultural sector which try to stabilize and enhance grower prices. The principal importance of the Capper-Volstead exemption is that it legalized the activities of farmers' cooperatives in processing and marketing. It also created conditions that would allow farmers' cooperatives to grow and acquire substantial market shares in some markets. The economic relevance of the EU exemption appears to be limited mainly to resolving the conflict between EU competition regulation and intervention in agricultural markets in the framework of the CAP. The concentration of supply by producer organizations is actively supported by EU agricultural policy. In most cases, the size and activities of producer organizations do not raise antitrust concerns, although a number of member countries are characterized by agricultural cooperatives with substantial market share in some sectors (e.g. Sweden, Denmark, and the Netherlands).

There is little empirical evidence for the extent to which the agricultural exemption enables the exploitation of market power in the framework of large producer organizations or agreements between such organizations. Economic theory identifies four conditions necessary for the successful exercising of cartel power: (a) an agreement among sellers, (b) the ability to detect cheating, (c) the punishment of cheating, and (d) the prevention of outside entry (Jacquemin and Slade, 1989). Cooperatives can sign binding marketing agreements with members. These agreements may prevent or at least minimize cheating if the probability of detection and the penalty for breach of agreement are high enough. On the other hand, cooperatives generally do not manage to organize all producers, enabling outsiders to free ride. Preventing entry is the most formidable obstacle to the exploitation of market power in the long run (Crespi and Sexton, 2003). Cooperatives generally cannot restrict members' production, and even if this were possible, they cannot prevent outside entry. Entry barriers in many agricultural sectors are quite low, and may simply entail a shift in production from one crop to another (one exception is orchards). Thus, if a cartel-like agreement of producers manages to increase prices above the competitive equilibrium, these profits will be eroded in the long run by an increase in output. Consequently, it appears that the potential to exploit market power via voluntary grower cooperation is limited. The analysis of voluntary cooperation in the Israeli fish sector confirms the theoretical prediction that equilibrium in a market with a monopoly cooperative will be close to the competitive equilibrium if the cooperative cannot restrict production effectively (Kachel and Finkelshtain, 2009). The study of Crespi and Chacón-Cascante (2004) demonstrated that even in the case of a marketing order which enables effective volume controls and controls nearly all of the US and most of the world market, the exploitation of market power is limited.

On the other hand, grower cooperation clearly has beneficial effects in imperfectly competitive markets. Small-scale production, inelastic short-term supply and buyer concentration are conducive to the exploitation of oligopsonistic market power. Grower cooperation in marketing may enable the exercise of countervailing bargaining power and enhance grower prices and welfare.

Yet, there is little justification for including wholesalers of agricultural products in the agricultural exemption if they are not owned by farmers and market to a large extent the products of their grower-owners. Arguments in favor of a limited antitrust exemption for the agricultural sector are based on the special characteristics of agricultural production which, on the one hand, are at the root of the inherent instability in farm prices and incomes, and, on the other, constrict farmers' possibility of exploiting economies of scale and scope in marketing and processing their products, establishing brands, investing in research and development and creating countervailing bargaining power in concentrated markets for their products.

Farmers can cooperate in marketing and processing their products, or establish

collective brands, without creating restrictive arrangements with non-farmer owned wholesalers. On the other hand, the collaboration with wholesalers is necessary to create effective restrictive arrangements regulating supply. However, such arrangements have the largest potential to restrict competition, increase farmer and consumer prices and cause a decline in welfare, and are therefore the most problematic from an antitrust point of view. It is controversial if supply management for stabilizing farm prices is necessary and beneficial<sup>36</sup>. If deemed necessary by the government, supply management should be implemented in a transparent way that enables government control, rather than in the framework of restrictive arrangements of growers and wholesalers.

The EU abolished its system for stabilizing prices of certain fruit and vegetables by market withdrawals in 2008. Now crisis management is the responsibility of producer organizations (usually marketing cooperatives owned by farmers), co-financed by the EU. The authority of Interbranch organizations is limited with regard to quantity regulation: they can set rules regarding the beginning of the marketing season and establish minimum quality and size requirements (Reg. 1234/2007). In the US, a limited number of marketing boards have the authority to regulate marketed quantities, under the supervision of the Ministry of Agriculture. The Israeli legislation provides boards with substantial authority to regulate quantities or buy surplus production, especially after the recent amendment of the Plant Board law. This authority can be employed to manage market supply, without relying on the agricultural exemption.

An additional reason for restricting the agricultural exemption to farmers is the inherent conflict of interest between farmers and wholesalers: while farmers would like to receive the highest possible price, profit-maximizing wholesale companies will try to pay farmers the lowest possible price. Wholesalers that are not owned by farmers may exploit the agricultural exemption against farmers, either by cartelistic agreements or tacit understandings among them, or by restrictive vertical arrangements which decrease competition (for example, arrangements creating barriers for switching wholesalers). Because of the wide exemption, the IAA cannot investigate whether there are restrictive arrangements in agricultural marketing that reduce competition, and it has no power to order the determination of such arrangements.

Proponents of the current exemption may argue that farmers in the EU and US are receiving additional support that is not available to Israeli farmers, thus

<sup>36</sup> According to rulings of Israeli courts (District Court of Jerusalem, 2006; High Court of Justice, 2007) perishability and seasonality of agricultural products necessitate supply management and coordination of marketing. On the other hand, economists tend to rely on the market mechanism to regulate supply and demand also for perishable and seasonal products.

decreasing the "need" for a wide agricultural exemption which can be used to substitute for government support. However, horticulture, the main agricultural sector in Israel, receives relatively little direct government support in the EU and hardly any support in the US. In any event, this argument does not provide any justification for including wholesalers in the agricultural exemption.

Our analysis suggests that it is necessary to amend the Israeli agricultural exemption from the prohibition of restrictive arrangements. We propose to consider two major changes: exclusion of wholesalers not owned by farmers from the exemption, and inclusion of a safeguard enabling intervention of antitrust authorities in cases of exploitation.

## **Summary and Conclusions**

The agricultural exemption in Israel is more restricted with regard to the products and activities exempted than those in the US and EU. In contrast, the Israeli exemption is very wide with regard to the firms included. In Israel, farmers and wholesalers of agricultural products are exempted from the prohibition of restrictive arrangements, while the exemptions in the US and EU include only farmers and farmers' associations. Our analysis suggests that the Israeli exemption of wholesalers from the prohibition of restrictive arrangements is not justified and may be detrimental for farmers. Another important difference is that the regulations in the US and EU include safeguards which can prevent exploitation of the exemption, while there are no such safeguards in the Israeli regulation.

The antitrust exemption in the US is necessary to enable the functioning of grower cooperatives for processing and marketing agricultural produce. In the EU, the exemption prevents conflicts between the CAP and antitrust regulation. It seems that farmers in Israel perceive the wide exemption as necessary for supply management of agricultural produce. However market intervention, if deemed necessary by the government, should be done under government supervision, and could be carried out in Israel by production boards.

Studies of the almond sector in the US and the aquaculture sector in Israel show that despite sector-wide cooperation among growers, little market power is exploited. Analysis of the Israeli citrus sector demonstrates that there is little scope to increase growers' revenues through cooperation in exports, while growers are hurt by concentration in the export sector. This appears to be different for avocado exports, but the avocado sector represents the only Israeli agricultural product enjoying relatively high market shares in export markets. To summarize, there seems to be little danger that cooperation among growers will lead to the exploitation of market power. On the other hand, cooperation of growers has many

benefits, e.g. the exploitation of economies of scale, the possibility of establishing collective brands, and the creation of bargaining power versus dominant buyers.

Additional quantitative research is necessary to estimate the economic impact of the broad scope of the Israeli antitrust exemption. Nonetheless, our analysis suggests that the Israeli antitrust exemption of the agricultural sector should be amended in order to prevent restrictive arrangements which might be detrimental to farmers and consumers. We recommend to consider restricting the Israeli agricultural exemption to farmers and farmers' associations, while abolishing the exemption for wholesalers who are not farmers or an association of farmers. A widening of the exemption with regard to the products included should be contemplated. This will ensure that farmers can cooperate in processing and marketing their products without worrying about antitrust regulation. Nevertheless, it should be considered to establish the possibility of intervention by antitrust authorities if the exemption is exploited to create a producers' cartel.

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