

Unclassified

DAF/COMP/GF/WD(2011)15



Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

25-Jan-2011

English - Or. English

**DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE**

**DAF/COMP/GF/WD(2011)15
Unclassified**

Global Forum on Competition

CRISIS CARTELS

Contribution from Greece

-- Session III --

This contribution is submitted by Greece under session III of the Global Forum on Competition to be held on 17 and 18 February 2011.

JT03295532

Document complet disponible sur OLIS dans son format d'origine
Complete document available on OLIS in its original format

English - Or. English

CRISIS CARTELS

-- Greece --

1. Introduction

1. This paper attempts to cast light on the main principles of the Industrial Restructuring Agreements (hereafter “IRA” or crisis cartels) from a Greek perspective. For this purpose we will explore the basic fundamentals of theory of harm concerning the formation of cartels during periods of economic downturn and we also analyse some basic characteristics of European cases. Then, we will analyse the recent Greek fish farm crisis cartel case.¹

2. Economic analysis of industrial restructuring agreements in heterogeneous markets

2. An IRA during a period of economic downturn which aims at reducing overcapacity may be considered lawful only in case of structural and not cyclical overcapacity.²

3. Cyclical overcapacity does not cancel the law of demand (when demand falls, market price decreases). Therefore, it is assumed that market forces (supply & demand) as well as competition will bring economy back to the equilibrium and firms that go bankrupt are those least adapted to the new economic environment due to the crisis.

4. For structural overcapacity to exist, the following minimum conditions must be met, over a prolonged period of time:

- A significant decline of the firm’s capacity utilisation;
- A reduction in output;
- Crucial operating losses for all undertakings concerned; and
- No alteration of the economic environment in the short-run.

5. It may prevail in declined economic environments where the market forces cannot solve the phenomenon of cyclical overcapacity and the market is characterised by a stable, transparent and symmetric structure. In such a situation, incumbents in the market are engaged in a “prisoner’s dilemma” game so as to force the competitor to exit the market.

6. Suppose the following game between two symmetric³ incumbents in a Cournot oligopoly market.⁴ The payoffs and the game matrix are given below:

¹ ECN Case number 2116.

² See Georgios Rounis, *Competition or Cooperation? The Limits of Firms’ Activity within the Community Area* (Athens/Komotini, 1992), p. 77 [in Greek].

Table 1. A static ‘capacity expansion’ game

| A Prisoner Dilemma game | | 2 nd Incumbent | | |
|---------------------------|---------------------|---------------------------|---------------------|-------------------|
| | | Build a big plant | Build a small plant | Not build a plant |
| 1 st Incumbent | Build a big plant | a, α | b, β | c, γ |
| | Build a small plant | d, δ | e, ε | f, ζ |
| | Not build a plant | g, η | h, θ | i, ι |

The Greek letters denote the payoffs of 2nd Incumbent.

7. Each firm has to simultaneously decide whether to build a big, small or not to build a new plant. The strategy of building a plant, either a big or a small, means that each incumbent has the opportunity to expand its production and hence the supply in the market. The structure of the payoffs of the 1st incumbent is the following:

$$\begin{aligned}
 a < b < c & \quad a < d, b < e, c < f \\
 d < e < f & \quad a < g, b < h, c < i \\
 g < h < i & \quad \text{and} \quad d < g, e > h, f > i \quad (1)
 \end{aligned}$$

8. Also, the structure of the payoffs of the 2nd incumbent is the below:

$$\begin{aligned}
 \alpha < \beta < \gamma \\
 \delta < \varepsilon > \zeta \\
 \delta < \zeta & \quad \alpha < \delta < \eta \\
 \eta < \theta > \iota & \quad \beta < \varepsilon < \theta \\
 \eta < \iota & \quad \text{and} \quad \gamma < \zeta < \iota \quad (2)
 \end{aligned}$$

9. From relationships (1) and (2) above and the game matrix in Table 1 we see that the strategy “build a big plant” is a dominated strategy for each firm⁵. Since the dominated strategy cannot be played by the two incumbents (both of them maximise their profit) we can eliminate it from the game matrix. By doing that we reduce the game to matrix in Table 2 below:

Table 2. A reduced static ‘capacity expansion’ game

| A reduced Prisoner Dilemma game | | 2 nd Incumbent | |
|---------------------------------|---------------------|---------------------------|-------------------|
| | | Build a small plant | Not build a plant |
| 1 st Incumbent | Build a small plant | f, ε | g, ζ |
| | Not build a plant | i, θ | j, ι |

For the payoffs of both incumbents see relationships (1) and (2).

³ We assume that marginal cost for both firms is zero.

⁴ We do not assume that the market is stable, transparent and symmetric. We rather prefer to concentrate on the impact of the structure of the market (Cournot, Bertrand, Stackelberg markets) on the overcapacity phenomenon.

⁵ A dominated strategy exists when each firm has another strategy that gives it a higher payoff no matter what the other firm does. In Table 1 both incumbents prefer to build a small plant and not to build a plant, rather than building a big plant, since their payoffs are smaller in the latter than in the former case.

10. It is clear from the reduced game matrix that both firms have a dominant strategy which is “build a small plant”.⁶ The 1st incumbent will always choose to expand its supply in the market since its payoffs e & f are higher than h & i correspondingly. Similarly, the 2nd incumbent will always choose to expand its supply in the market since its payoffs ϵ & θ are higher than ζ & ι correspondingly. In the reduced game matrix, the Nash equilibrium is dominant strategy equilibrium.⁷

11. However, payoffs i & ι are higher than payoffs e & ϵ which constitute the aforementioned Nash equilibrium. The “myopic” behaviour of both incumbents is due to the fact that each of them prefers to expand the supply in the market and in the long-run to lose part of its profits until the other incumbent effectively exits the market. Therefore, both of them prefer to function in a non-equilibrium point rather than giving up market shares and consequently incurring higher their costs.

12. The “myopic” behaviour of the incumbents leads to an overcapacity phenomenon in the future. Even though the strategy “built a big plant” is a dominated strategy and cannot be chosen by the incumbents, the latter prefer to build a small plant and hence to expand their production by a small proportion.

13. Suppose that the static reduced game matrix becomes a dynamic reduced game matrix and in each period both firms decide to expand their production by the same small proportion. That will result in supply being higher than demand and market price going down. If the number of periods tends to infinity, market price might be lower than average variable cost and hence incumbents may be forced to exit the market.

14. Let us now suppose that the market consists of a leader and a follower (so called Stackelberg market).⁸ The leader decides first whether to build or not to build a new plant and the follower, after the choice of leader, decides whether to follow the leader’s strategy and hence limit its own actions or to choose a different strategy which may cause a non-equilibrium optimal decision point.⁹

15. In Scheme 1 below, the 1st incumbent is the leader and the 2nd incumbent is the follower. Scheme 1 depicts the transformed sequential expansion capacity game tree of game matrix in Table 1 above. It is obviously from the payoff structures of both firms in the market that the Nash equilibrium in the transformed game tree is the “built a big plant” strategy for the leader and the “not build a plant” strategy for the follower.

16. Especially, we use the “backward induction” technique to find the Nash equilibrium. The follower’s optimal decisions in each point at the game tree is “build a small plant” in case the leader decides not to build or to build a small plant and “not to build a plant” in case the leader chooses to build a big plant. Therefore, the leader by choosing not to build a plant knows that the follower will decide to build a small plant since it maximises its payoff ($\iota < \theta$ & $\theta > \eta = \iota$, where θ is the payoff of the follower if it decides to build a small plant). Similarly, if the 1st incumbent selects to build a small or a big plant, the follower will choose to build a small or not to build a plant correspondingly (when the follower chooses the first, $\zeta < \epsilon$, $\epsilon > \delta < \zeta$, where ϵ denotes the payoff by building a small plant and when the follower decides the second, $\gamma > \beta > \alpha$, where γ denotes the payoff by not building a plant).

⁶ A dominant strategy is a strategy that is better than any other strategy that a firm might choose, no matter what strategy the other firm follows. In the reduced game matrix e & f are higher than h & i , therefore, the 1st incumbent will always choose to expand its supply in the market.

⁷ A dominant strategy equilibrium occurs when each firm uses a dominant strategy.

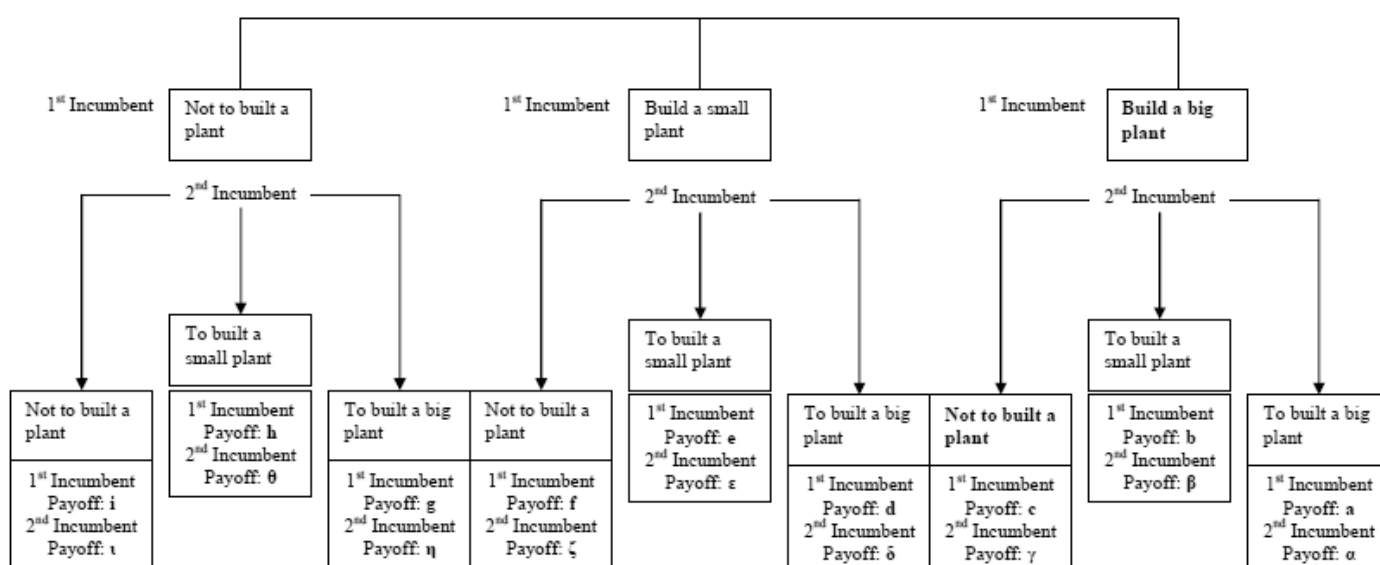
⁸ The leader differs from the follower in terms of market shares (size). Therefore, the two incumbents are not symmetric firms.

⁹ Such games are called “sequential move games” and for each decision point the firms must choose the optimal decision that maximises their profits at that point.

17. Since the leader knows the follower’s optimal choice in every single point of the second stage of the game tree, it will follow a strategy that maximises its payoff. That strategy is to build a big plant and the incumbent not to build a plant (the payoff of building a small plant (e) is higher than the payoff of not building a plant (h), but both payoffs are smaller than the payoff of building a big plant (c)).

18. Comparing the results of simultaneous and sequential games, we conclude that both situations may result in overcapacity, due to the “myopic” behaviour of the incumbents. Indeed, in Stackelberg markets with perfect information and cost- asymmetries among firms (due to the size), the overcapacity problem may be the only outcome, due to the “myopic” behaviour of the leader. However, the total supply in Stackelberg markets may be lower than in Cournot fashion markets. The latter depends on the number of the firms in the market. The higher the number of Cournot oligopolists, the higher the level of the overcapacity problem in the market.

Scheme 1. A sequential “capacity expansion” game tree



Payoff structures: 1st Incumbent [i > h > g], [f > e > d], [c > b > a], [i = c < f], [e > h > b], [g > d > a], [c > e > h].
 2nd Incumbent [ι < θ & θ > η = ι], [ζ < ε, ε > δ < ζ], [γ > β > α], [ι > ζ > γ], [θ > ε > β], [η > δ > α].

3. The European experience in dealing with “Crisis cartels”

19. The European Union Courts and the European Commission are generally reluctant to recognise any exception to the rule of the prohibition of cartels and emphasise that

*“undertakings must use only means that are consistent with the competition rules. Price fixing and market sharing are certainly not legitimate means of combating difficult market conditions. Nor are undertakings entitled to flout [EU] competition rules because of alleged overcapacity”.*¹⁰

20. The position is, generally, that crisis cartels are serious infringements of the competition rules that by definition restrict competition “by object” in the Article 101(1) TFEU sense.¹¹ Such agreements

¹⁰ Commission Decision of 16 December 2003 (*Industrial tubes*), OJ [2004] L 125/50, para. 371.

¹¹ Case C-209/07, *Competition Authority v. Beef Industry Development Society Ltd. and Barry Brothers (Carrigmore) Meats Ltd.*, [2008] ECR I-8637, para. 40.

will not be considered as *per se* illegal, since it is theoretically possible that they satisfy the criteria of Article 101(3) TFEU,¹² however, in practice, this is unlikely to happen. Indeed, the more severe the restriction of competition, the less likely it is that an exemption will be available.¹³

21. In particular, the Commission, in most cases, does not recognise that overcapacity as such can lead to the justification of crisis cartels. In the *Industrial tubes* case, the Commission stated that the specific sector was an expanding sector with an increasing compound growth annual rate between 1991 and 2000. It also emphasised that the main Member States such as Germany, Italy, France, U.K. and Spain experienced an expansion of the growth rate during the same period and the “*capacity increase was the result of the investments carried out during the demand boom, between 1999 and the early months of 2001*”.¹⁴ Therefore, it concluded that the sector of industrial tubes during the infringement period was not in a structural overcapacity crisis.

22. The overcapacity problem was also not considered by the Commission as a serious problem that would justify the creation of a cartel in *ICI* or in *Tokai Carbon*. In the former case, the General Court emphasised that

*“the fact that in previous cases the Commission had considered that, in view of the factual circumstances, account had to be taken of the crisis affecting the economic sector in question cannot oblige the Commission to take similar account of such a situation in the present case since it has been proved to the requisite legal standard that the undertakings to which the Decision is addressed committed a particularly serious infringement of Article [101(1) TFEU]”.*¹⁵

23. Similarly, the Court held in the latter case that

*“the Commission is not required to regard as an attenuating circumstance the poor financial state of the sector in question. [J]ust because the Commission has taken account in earlier cases of the economic sector as an attenuating circumstance it does not necessarily have to continue to observe that practice [...] [A]s a general rule cartels come into being when a sector encounters problems. If the applicants’ reasoning were to be followed, the fine would have to be reduced as a matter of course in virtually all cases”.*¹⁶

24. Then, in *SGL Carbon*, it is mentioned that

“the Commission is not required, when determining the amount of the fine, to take into account the poor financial situation of an undertaking, since recognition of such an obligation would be

¹² Joined Cases 56/64 and 58/64, *Établissements Consten S.A.R.L. and Grundig-Verkaufs-GmbH v. Commission*, [1966] ECR 299, pp. 342, 343 and 347; Case T-17/93, *Matra Hachette SA v. Commission*, [1994] ECR II-595, para. 85; Case T-168/01, *GlaxoSmithKline Services Unlimited v. Commission*, [2006] ECR II-2969, para. 233.

¹³ *Commission Notice - Guidelines on the Application of Article 81(3) of the Treaty*, OJ [2004] C 101/97, para. 46.

¹⁴ Commission Decision of 16 December 2003 (*Industrial tubes*), OJ [2004] L 125/50, para. 374.

¹⁵ Case T-13/89, *Imperial Chemical Industries plc v. Commission*, [1992] ECR II-1021, para. 372.

¹⁶ Joined Cases T-236/01, T-239/01, T-244/01 to T-246/01, T-251/01 and T-252/01, *Tokai Carbon Co. Ltd. v. Commission*, [2004] ECR II-1181, para. 345.

tantamount to giving unjustified competitive advantages to undertakings least well adapted to the market conditions”.¹⁷

25. In the past, however, the European Commission has exceptionally found that some structural crisis cartels met the conditions for exemption laid down in Article 101(3) TFEU.¹⁸

26. In some other cases, the Commission has considered the existence of a structural crisis as attenuating circumstances.¹⁹

27. In general, the Commission has considered that a “crisis cartel” could exceptionally be accepted only in front of a structural crisis with overcapacity

“where over a prolonged period all the undertakings concerned have been experiencing a significant reduction in their rates of capacity utilization and a drop in output accompanied by substantial operating losses and where the information available does not indicate that any lasting improvement can be expected in this situation in the medium-term”.²⁰

28. Such “crisis cartels” could, according to the Commission, be accepted if they involve all or a majority of the undertakings in an entire sector and solely aim at achieving a coordinated reduction of overcapacity, while not restricting the commercial freedom of the firms involved. Alternatively, such agreements could be concluded by a small number of firms, while providing for reciprocal specialisation to enable them to close excess capacity. In both solutions, the arrangements to reduce capacity must not be accompanied or achieved by unacceptable means such as price- or quota-fixing, or market-sharing.²¹

29. In the *Seamless steel tubes*, the Commission emphasised the following:

“Since the 1970s, the Community steel market has been affected by a long, serious crisis, the most notable features of which have been the continuous fall in demand and the collapse of prices. These market conditions have brought with them serious problems of overcapacity, low plant-utilisation rates and prices failing to cover total production costs and ensure the profitability of firms. The crisis in the steel market has not just hit ECSC steel but has also affected the non- ECSC sectors, which include the pipes and tubes covered by this decision [...]

With regard in particular to the pipe and tube industry in the Community, since 1980 Community production has been severely restructured in order to adapt capacity to changing market

¹⁷ Case C-308/04 P, *SGL Carbon AG v. Commission*, [2006] ECR I-5977, para. 105. See also Joined Cases 96/82 to 102/82, 104/82, 105/82, 108/82 and 110/82 *IAZ International Belgium and Others v Commission* [1983] ECR 3369, paras 54 and 55.

¹⁸ Commission Decision of 6 August 1984 (*Zinc Producer Group*), OJ [1984] L 220/27; Commission Decision of 4 July 1984 (*Synthetic Fibres*), OJ [1984] L 207/17; Commission Decision of 29 April 1994 (*Stichting Baksteen (Dutch Bricks)*), OJ [1994] L 131/15, para. 26.

¹⁹ Case T-30/05, *William Prym GmbH & Co. KG and Prym Consumer GmbH & Co. KG v. Commission*, [2007] ECR II-107 (summ.pub.), para. 207. See e.g. Commission Decision of 21 January 1998 (*Alloy surcharge*), OJ [1998] L 100/55, paras 83-84: “[T]he economic situation in the sector at the end of 1993 was particularly critical. The price of nickel was rising rapidly, while the price of stainless steel was very low [...] These factors justify a reduction in the basic amount [of the fine]”.

²⁰ European Commission, *Twelfth Report on Competition Policy – 1982* (Brussels/Luxembourg, 1983), para. 38.

²¹ European Commission, *Thirteenth Report on Competition Policy – 1983* (Brussels/Luxembourg, 1984), para. 56.

*conditions. By the end of 1990, seamless pipe and tube production capacity had been reduced by about 20 %. Between 1988 and 1991, more than 20000 jobs were lost. Since early 1991, the worsening situation of Community production, combined with the growing influx of imports, has resulted in draconian decisions having to be taken concerning the continued reduction of capacity to core levels and in the closure of several production mills in Germany, Italy and the United Kingdom”.*²²

30. In *ENI/Montedison*, the agreements between ENI and Montedison to reduce capacity met the conditions for exemption laid down in Article 101(3) TFEU, since they contributed to improving the production and distribution of goods and to promoting technical and economic progress, while allowing consumers a fair share of the resulting benefit. It also emphasised that

*“The exemption is justified because the agreements are an essential first step in the rationalization of ENI’s and Montedison’s petrochemical business which forms part of an industry suffering serious structural overcapacity in the whole Community. As a result of the agreements, the parties were able to restructure their businesses more quickly and fundamentally than would have been possible individually [...] The agreements thus produce objective benefits - notably in reducing the excess capacity in an industry suffering from structural overcapacity - which outweigh the abovementioned restrictions of competition”.*²³

4. The Greek fish farm crisis cartel case

4.1 Summary of the Case

31. The five biggest Greek fish farming undertakings notified an agreement to the Hellenic Competition Commission (“HCC”), stating that, due to overproduction, they jointly agreed to limit/control the sales and fix the selling prices of gilthead sea bream, for a limited period of six months,²⁴ in order to rationalise production and to restore the prices to a level that covers the production cost. Following this notification, the HCC initiated an *ex officio* investigation.

32. The HCC defined as relevant product markets the market for the production and distribution of fresh fish of Mediterranean fish farming (more specifically gilthead sea bream) and the market for the production and distribution of fry and eggs for fish farming.

33. In their defence, the companies concerned claimed that overproduction of goods in their sector has forced many undertakings to sell their products at prices substantially below production cost. The parties allege that by limiting/controlling the sales and by fixing the selling prices of gilthead sea bream, for a limited period of six months, they aimed at rationalising production and at restoring prices to a level that covers their costs, thus securing the viability of many undertakings of the sector, which would be beneficial for competition in the long-run.

4.2 Analysis of the Overcapacity Problem: The Market of Mediterranean Aquaculture in Greece

34. The market for aquaculture in Greece is a dynamic sector of the Greek economy. Greece has been the biggest producer of fresh fish of Mediterranean fish farming in recent years. The market for Mediterranean aquaculture constitutes one of the four major export sectors of Greece; it consists of 100 big

²² Commission Decision of 8 December 1999 (*Seamless steel tubes*), OJ [2003] L 140/1, paras 25 and 26.

²³ Commission Decision of 4 December 1986 (*ENI/Montedison*), OJ [1987] L 5/13, paras 26-28.

²⁴ Between 2008 and 2009.

and small firms, in terms of market shares, with the former accounting for the 60% of the total production. During the period 2006 - 2007, the total value of sales increased by almost 20%, the operating profit increased by almost 28% and the profit pre taxes decreased by almost 2%.

35. The financial analysis of the aforementioned market indicates that 70% of the profitable firms of the market (almost 65% - 70% of the total participants) were responsible for the 93% of the total value of sales. The non-profitable firms of the market (almost the 30% of the participants) were responsible for the remaining value of the total sales. During the period 2003 - 2007, the 10 biggest firms of the market exhibited an increased mark-up of operating profit²⁵ of almost 7% and an increased mark-up of net profit of almost 7%.²⁶ At the same time, EBITDA remained stable, from 16.92% to 17.15%.

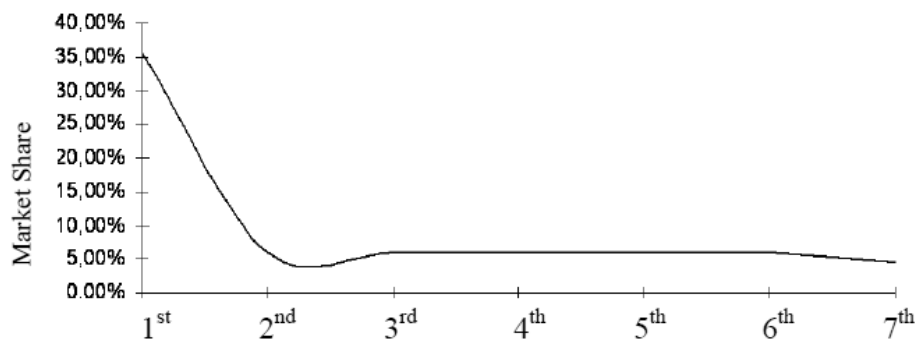
36. However, on the same period under scrutiny, the total number of firms (including the small and non-profitable firms) showed a decreased mark-up of operating profit of almost 5.5%, a decreased mark-up of net profit of almost 10% and a decreased EBITDA of almost 10.5%.

37. In terms of efficiency, the general, specific, and cash flow indexes remained at the same level during the same period. In particular, the cash flow index of the 10 biggest firms in the market increased from 0.06 to 0.11, while the same index for the total number of firms in the market decreased from 0.18 to 0.13.

38. During the period 1990 - 2002, a lot of firms entered the market intending to take advantage of the opportunities of a rapidly growing and dynamic sector. The consequence of that was an increase of the supply above the level of demand, especially for gilthead sea bream, while its price decreased dramatically.

39. Diagram 1 below shows the structure of the market for the production and distribution of fresh fish of Mediterranean fish farming (more specifically gilthead sea bream) in 2007.

Diagram 1. Structure of the market for the production and distribution of fresh fish of Mediterranean fish farming: 2007



7 largest firms of the market for the production and distribution of fresh fish of Mediterranean fish farming

Source: HCC's elaboration of data

²⁵ $\frac{\text{Operating mark-up}}{\text{Total Sales}} * 100$

²⁶ $\frac{\text{Profit pre taxes}}{\text{Total Sales}} * 100$

40. The above diagram clearly illustrates that the market for the production and distribution of fresh fish of Mediterranean fish farming is characterised as a heterogeneous market in terms of the size (market share) of its participants.

41. Consumption during the period 2004 - 2008 exhibited a rate reduction, especially during the last two years. Imports did not play a crucial role in the domestic market, while exports accounted for more than 50% of the production of gilthead sea bream and bash fish (see Table 3).

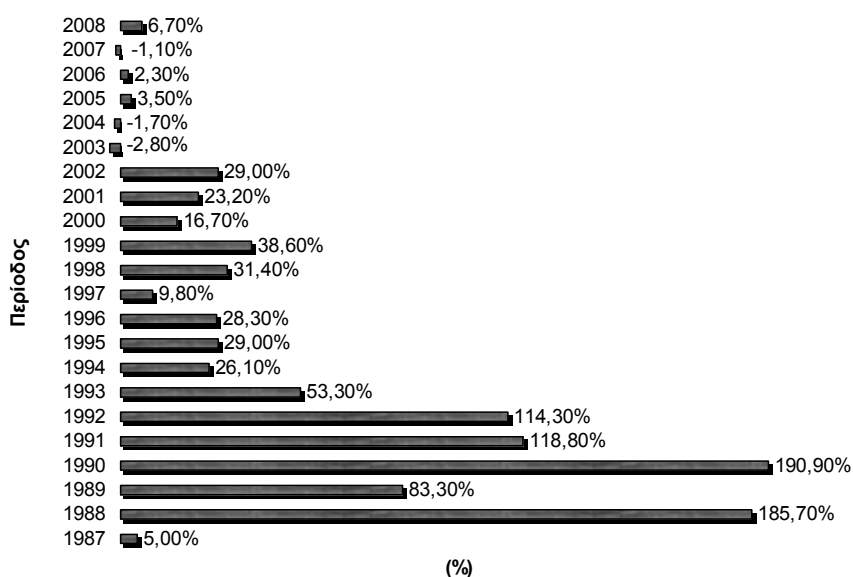
Table 3. Domestic consumption and exports of gilthead sea bream and bash fish: (2004-2008)

| Year | Production of gilthead sea bream (tns) | Production of bash fish (tns) | Total production | Imports | Exports | Consumption |
|------|--|-------------------------------|------------------|---------|---------|-------------|
| 2004 | 44,200 | 40,800 | 85,000 | 1,500 | 48,000 | 38,500 |
| 2005 | 48,400 | 39,600 | 88,000 | 1,300 | 54,500 | 34,800 |
| 2006 | 51,300 | 38,700 | 90,000 | 2,500 | 55,000 | 37,500 |
| 2007 | 55,000 | 34,000 | 89,000 | 5,500 | 70,000 | 24,500 |
| 2008 | 62,000 | 33,000 | 95,000 | 6,200 | 72,000 | 29,200 |

Source: ICAP (2009)

42. Diagram 2 below depicts the average rate of annual production change of gilthead sea bream from 1987 to 2008.

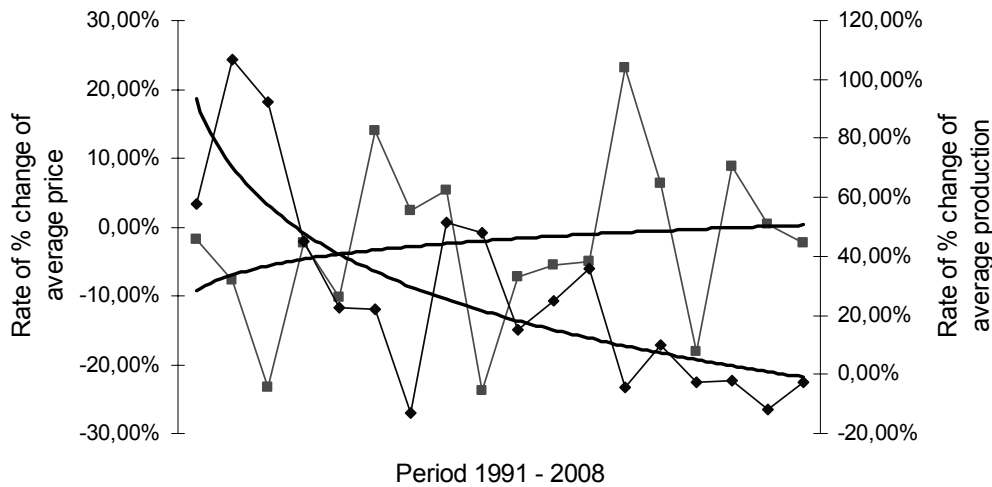
Diagram 2. Average rate of annual production change of gilthead sea bream: 1987-2008



Source: HCC's elaboration of data

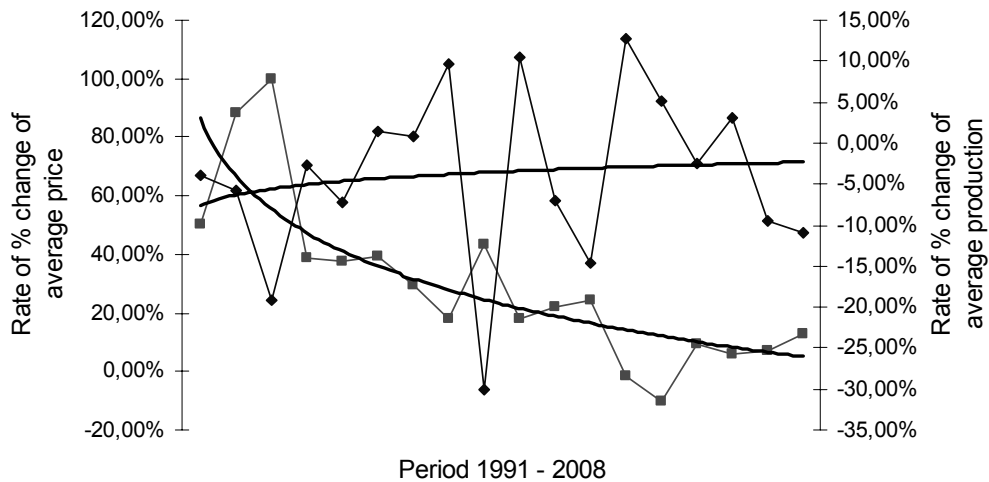
43. The evolution of the price for gilthead sea bream and bash fish shows that it followed the law of demand. Diagrams 3 & 4 show that an increase in the average production of both products decreases the price of both of them, assuming that all other factors which may affect demand, remain stable. The decrease of the price is more severe in the gilthead sea bream rather than in the bash fish.

Diagram 3. Rate of % change of average price and production of bass fish: 1991-2008



Source: HCC's elaboration of data

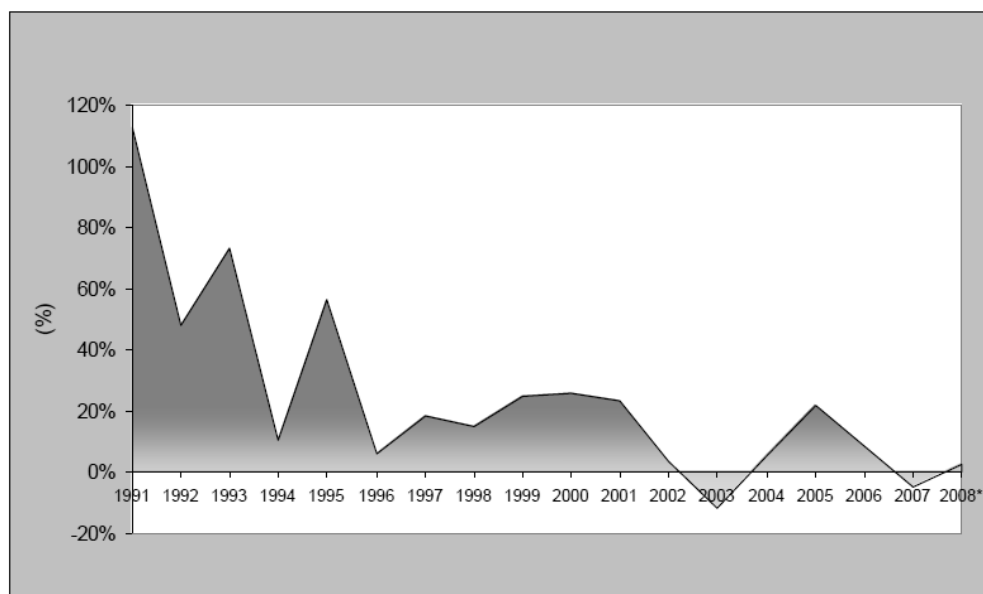
Diagram 4. Rate of % change of average price and production of gilthead sea bream: 1991-2008



Source: HCC's elaboration of data

44. The black solid line in both diagrams shows the natural logarithm of average price and production per year for both products. It is obvious that average price and production moved in different directions during the period under scrutiny. The decrease of the average price of both products was more severe in the first years of the period under analysis, reflecting the overcapacity problem at the period.

45. As to the market for the production and distribution of fry and eggs for fish farming, the annual average rate of total production increased by 21.4% during the period 1991 - 2008. Diagram 5 below illustrates the average rate of annual production change of fry and eggs for fish farming during the period 1991 - 2008.

Diagram 5. Average rate of annual production change of fry and eggs for fish farming: 1991-2008

Source: Data elaboration by the HCC. *Estimation

46. Moreover, the evolution of domestic consumption of fry and eggs for gilthead sea bream and bash fish during the period 2004 - 2008 has shown a positive trend, except for 2007. In particular, during the first 3 years of the aforementioned period, the consumption increased, on average, by almost 10% per year (see Table 4).

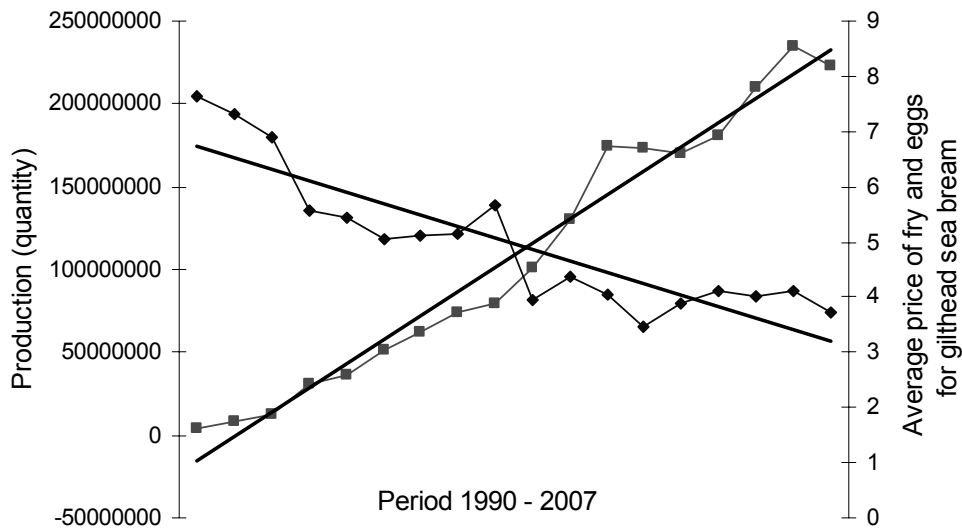
Table 4. Domestic consumption and exports of fry and eggs for gilthead sea bream and bash fish: (2004-2008)

| Year | Production of fry and eggs for gilthead sea bream (tns) | Production of fry and eggs for bash fish (tns) | Total production | Imports | Exports | Consumption |
|--------------|---|--|------------------|------------|------------|-------------|
| 2004 | 180,500,000 | 99,500,000 | 280,000,000 | 12,000,000 | 0 | 292,000,000 |
| 2005 | 219,000,000 | 122,000,000 | 341,000,000 | 15,000,000 | 20,000,000 | 336,000,000 |
| 2006 | 235,000,000 | 135,000,000 | 370,000,000 | 16,000,000 | 22,000,000 | 364,000,000 |
| 2007 | 223,000,000 | 130,000,000 | 353,000,000 | 16,000,000 | 55,000,000 | 314,000,000 |
| 2008* | 217,000,000 | 145,000,000 | 362,000,000 | 17,000,000 | 57,000,000 | 322,000,000 |

Source: ICAP (2009). *Estimation

47. During the period 1990 - 2007, the average price of fry and eggs for gilthead sea bream and bash fish decreases as soon as the supply of the market increases. In particular, the average price of fry and eggs for gilthead sea bream was below 4 euro during the period from 2000 to 2007, while at the same time, the average production of fry and eggs for gilthead sea bream remained in high levels (see diagram 6).

Diagram 6. Average price and production of fry and eggs for fish gilthead sea bream: 1990-2007

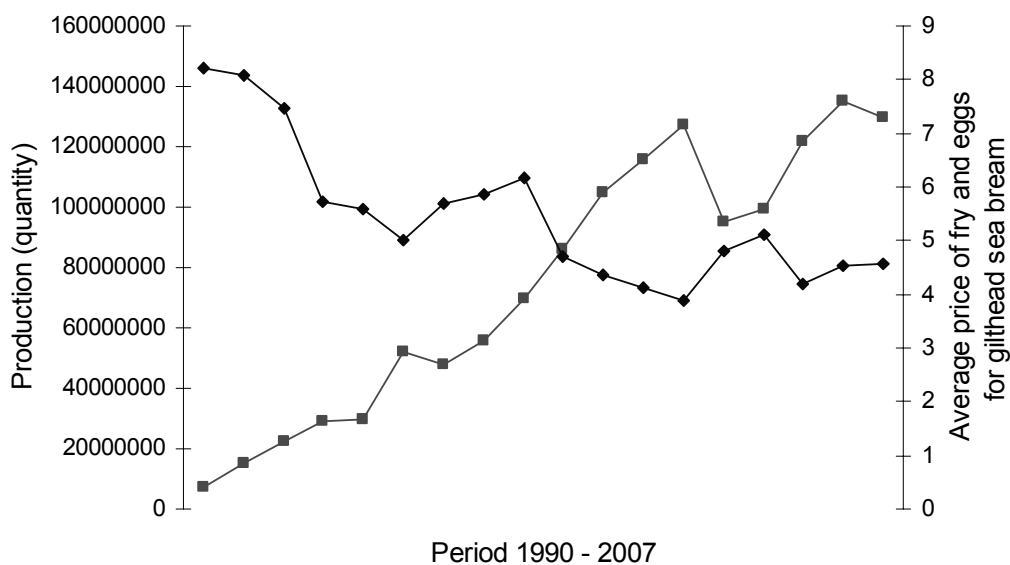


Source: Data elaboration by the HCC.

48. The same picture holds for the average price of fry and eggs for bash fish. There is a decline, but in absolute terms prices are higher than the average price of fry and eggs for gilthead sea bream (diagram 7).

49. Finally, the cost of production for gilthead sea bream and bash fish did not differ dramatically among the five Greek fish farming undertakings that participate in the agreement. Therefore, the only source of asymmetry among the firms in the market is their size, in terms of market share, between the group of largest firms and the group of smallest firms in the market.

Diagram 7. Average price and production of fry and eggs for bash fish: 1990-2007



Source: Data elaboration by the HCC.

4.3 *Assessment of The Overcapacity Problem*

50. In its decision, the HCC held that the above agreement to limit/control sales and to fix the selling prices of gilthead sea bream for a period of six months, constituted a hard core restriction of competition, i.e. a restriction of competition “by object” in the sense of Articles 1(1) L. 703/1977 and 101(1) TFEU. Although an exemption under Articles 1(3) L. 703/1977 and 101(3) TFEU is not theoretically excluded, price-fixing and output-limiting agreements are most unlikely to fulfil the criteria for an individual exemption. As a general rule, such agreements do not bring about objective economic advantages, nor can they be deemed indispensable for the attainment of such advantages. It is further unlikely that the restriction of competition can be counter-balanced in a proportionate manner by measurable benefits that are passed on to the consumers.

51. The market for Mediterranean aquaculture in Greece is an export-oriented sector. The firms that agreed to form the “crisis cartel” constitute almost 30% of the world market for Mediterranean aquaculture. From Table 3, we see that 50% - 60% of the production of gilthead sea bream and bash fish is export-oriented rather than destined for domestic consumption.

52. The analysis of the market shows a decline in the rate of percentage change of gilthead sea bream production from 2003 to 2008, following a decline of the level of consumption from 2004 to 2008 (diagram 2 and Table 3 correspondingly). Nonetheless, there was no significant drop in demand and/or output over a prolonged period of time. To the contrary, production and consumption indexes generally continued to exhibit a positive trend.

53. The evolution of the price for gilthead sea bream and bash fish further indicates that it followed the laws of offer and demand, such that there was no reason to believe that market forces would be likely to discipline expansion of capacity and bring back the market to an equilibrium point.

54. Moreover, market participants did not incur substantial operating losses over a prolonged period of time. In terms of efficiency, the general, specific, and cash flow indexes remained generally stable during the same period, with the key players exhibiting sustained profits (albeit relatively reduced in the last 2 years). In particular, the cash flow index of the 10 biggest firms in the market increased from 0.06 to 0.11 during the period from 2003 to 2007.

55. In addition, the relevant market was not characterised by stable and symmetric structures, such that it could be assumed that weaker (least efficient) firms would be forced out of the market and the problem of overcapacity would not persist, bringing the market back to equilibrium.

56. In any event, the agreement in question was not limited to a reduction of overcapacity, based on a concrete restructuring plan with objective criteria for the removal of inefficient capacity. To the contrary, it contained no specific restructuring plan, while essentially extending to output-limitation and price-fixing restrictions – the primary aim being to achieve the increase of selling prices in the short run (to the benefit of producers and to the detriment of consumers).

57. More importantly, the HCC concluded that the poor economic performance of the market under scrutiny was a result of the actions of the undertakings concerned. At their own admission, the undertakings concerned set over-ambitious targets, while failing to foresee that the consumption growth would slow down at higher pace.

58. The firms in the market should have foreseen that such an expansion of the market capacity may not be absorbed by demand and hence, the market price may decrease, reaching the level of the cost of production and, in some circumstances, going even below it. The participating firms believed that such a “myopic” behaviour would increase their power (by increasing their market share) in the market, while

failing to realise that the result of such a development coincided with a non-equilibrium point (see Table 1). Instead, market players should have taken individual steps to decrease capacity and/or reacting to the current downturn by pursuing consolidation and/or by engaging in efficiency-enhancing specialization agreements or similar actions. Consolidation could have helped to eliminate misallocation of resources, increase efficiency and decrease supply.

59. According to the HCC, although the financial position of the firms concerned may have somewhat deteriorated in recent years,, that was mainly because of (a) the fact that participants in the agreement were least-adapted to market conditions, (b) the economic crisis that negatively affected major sectors of the Greek economy, among them the market for Mediterranean aquaculture and (c) the reduction of the level of financing in the last two years (again a result of the economic crisis).

60. Overall, based on the specific circumstances at hand, the HCC concluded that the market for Mediterranean aquaculture and, in particular, the market for the production and distribution of fresh gilthead sea bream in Greece, was not in a structural crisis. Its recent poor performance was mostly a result of the economic crisis negatively affecting the Greek economy in the last 2.5 years, as well as of the “myopic” behaviour of the firms concerned, which set over-ambitious production targets.