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United States v General Dynamics:

A Reappraisal

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In 1959, General Dynamics acquired Material Services. Acquiring Material Services turned General Dynamics into the nation's sixth largest coal producer and the largest producer in the Midwest. Such a status was made possible by Material Services' two recent acquisitions, United Electric and Freeman Coal.

In 1967, the Department of Justice (DOJ) launched an attack against General Dynamics. The foundation of the attack was that General Dynamics had, according to the DOJ, helped to further the concentration of the coal industry in both the Eastern Interior Coal Province¹ (or the EICP) and the State of Illinois. The case was brought to the District Court that ruled ultimately in favor of General Dynamics. On appeal to the Supreme Court, in 1974, a ruling was handed down that vindicated the actions of General Dynamics and dismissed the arguments proffered by the DOJ.

The purpose of this paper is to examine the reasons behind Material Services' acquisitions, the reasons why the Government contested the mergers, and how the Government erred in analyzing the case. We wish to show that the combination of the three coal firms—Material Services, Freeman Coal, and United Electric—occurred for reasons of economic efficiency and practicality, not based on any atavistic desire to monopolize and damage social welfare.

This paper is divided into 7 sections. Section I shall provide a brief history of General Dynamics and of Material Services. Section II shall briefly discuss the DOJ's merger guidelines. Section III will discuss the DOJ's criticisms of Material Services' acquisition of the two other coal companies, and will briefly discuss General Dynamics' defense. Section IV will analyze the shortcomings of industry-concentration analysis. Section V will demonstrate how functional was applied to this case. Section VI will discuss the benefits of the acquisition of Freeman Coal and United Electric. Section VII will discuss the Court's response to the DOJ's arguments. The lasting impact of *General Dynamics* will also be considered.

Section I. General Dynamics and Material Services.

General Dynamics has been operating since the turn of the century. That firm has historically been a well-diversified, multi-product company. Aircraft, communications, and marine products have been the longest running product lines. The company's largest purchaser is the Federal Government. More recently, the company has expanded into the telecommunications and computer software fields.

Material Services is considerably smaller than General Dynamics. The former is engaged in producing and supplying building materials. Material Services also operates coalfields in the Midwest region. In the 1950s and 1960s, the company undertook the acquisition of two companies engaged in the extraction of coal. Freeman Coal and United Electric were acquired, in part or in whole, by Material Services. Freeman Coal was engaged predominantly in underground mining, and United Electric operated many strip mines in Illinois. The benefits of these horizontal mergers are discussed in Section VI.

In 1959, General Dynamics acquired Material Services. Being two corporations having wholly different product lines, the acquisition of Material Services can be best described as conglomerate. General Dynamics' purchase of Material Services was a part of a diversification program "aimed at expanding...into commercial, nondefense lines" (Posner 426). Seven years later, General Dynamics tendered an offer to purchase the outstanding shares of United Electric. The offer was successful and the acquisition of United Electric under General Dynamics had been made complete. In 1969, the DOJ contested General Dynamics' acquisition of United Electric, a process which had begun under Material Services' directorship, and turned General Dynamics into the largest coal-producing firm in the Midwest.

Section II. DOJ's 1968 Guidelines for Horizontal Mergers.

The DOJ has adopted many guidelines over the decades to provide a framework for identifying those firms whose actions both violate the Sherman Act (and the amending Clayton and Cellar-Kefauver Acts), and, as a consequence, necessitate the response of the DOJ. The case against General Dynamics falls under the 1968 Guidelines. This section shall provide a brief introduction to those guidelines.

Horizontal mergers between firms may carry many benefits. The most obvious are the synergies that are generated by combining the production processes of two or more firms (Walters 218). As a result of a merger, costs may be minimized, greater resources may be allocated to research, and the levels of technical skills of both firms may be raised.

The benefits of such merger activity may be negated if the combination concentrates a market to such an extent that competition is lessened and consumer welfare declines. The DOJ's criticisms of horizontal mergers in concentrating markets are that merged firms may not face the degree of competition as they had hitherto been subject. As a result of decreasing competition, the larger, postmerged firm may be disinclined to operate as efficiently. If firms are able to do so without a contrary response by their competitors, firms may cut output and raise prices. This would effectively erode consumer welfare. The DOJ also contests horizontal mergers between firms whose combination tends to increase market concentration.

The DOJ will contest mergers if they fall within certain parameters. For example, in markets where the shares of the four largest firms are equal or in excess of 75%, the merger will be contested (Thompson 184). A much more comprehensive look at the parameters for horizontal mergers is available in Thompson's "Text, Cases, and Materials on Antitrust Fundamentals."

One aspect of the DOJ's guidelines that will be touched on more broadly concerns the issue of synergies. According to Thompson, the DOJ will not refuse to challenge a merger merely on the grounds that such a combination produces synergies (185). The reasons for this are that synergies are difficult to measure, and also because the synergies that a combination can generate may be producible within the individual firm itself. This is of great importance because the combination of Freeman Coal and United Electric under Material Services generated numerous synergies, as will be mentioned in Section VI.

One of the key elements of *General Dynamics* was the use of functional analysis of the merging companies and the conditions of the industry the companies were engaged (Stelzer 170). According to Rogowsky, the Court considers the probable effects of the merger, the history of the industry, the structure of the market, the financial conditions of the companies involved, and, most importantly, the creation of any efficiencies (148). Rogowsky writes, "[t]he Guidelines have not been ignored by the judiciary, but they have certainly not been binding" (148). The use of functional analysis by the courts dispel immediately with the notion that the merging of two or more firms, whether or not they meet the criteria established by the DOJ, will be ruled per se illegal. In *Brown Shoe*, the Court maintained that:

"Statistics reflecting the shares of the market controlled by the industry leaders and the parties to the merger are, of course, the primary index of market power; but only a further examination of the particular market—its structure, history,

and probable future— can provide the appropriate setting for judging the probable anti-competitive effect of the merger" (Kitt 266).

It should be noted, however, that the use of functional analysis began with

Brown Shoe, which predates *General Dynamics*.

Section III. DOJ’s Criticisms of Material Service’s Acquisition of Freeman Coal and United Electric, and the Insufficiency of Concentration Ratios

The DOJ followed in the history of *United States v. Aluminum Company of America* (1964) by asserting that “if concentration is already great, the importance of preventing even slight increases in concentration and so preserving the possibility of eventual deconcentration is correspondingly great” (Moyer 19). The DOJ, thus, charged that the acquisition of United Electric, initiated by Material Services and finalized under General Dynamics, had further induced concentration in the coal industry in the Eastern Interior Coal Province (Stelzer 168). The DOJ demonstrated, in the relevant geographic market, the total number of coal companies had decreased. Also, coal had been shown to be a market, which lacked interfuel competition. In addition, the DOJ provided evidence that a small concentration of firms were taking a commanding lead in the production of coal. Table I illustrates this last point.

Table I				
Concentration of the Coal Industry				
In the Eastern Interior Coal Province				
And Illinois				
	Eastern Coal Province		Illinois	
	1957	1967	1957	1967
Top 2 Firms	29.6	48.6	37.8	52.9
Top 4 Firms	43.0	62.9	54.5	75.2
Top 10 Firms	65.5	91.4	84.0	98.0

Thompson, George. *Text, Cases, and Materials on Antitrust Fundamentals*, Pp. 182.

The DOJ charged General Dynamics with encouraging the concentration of the coal industry in the Midwest. Even though General Dynamics had not been charged with any violation of conduct such as price discrimination or price gouging, the mere change in the structure of the industry sufficed to warrant prosecution.

Under attack by the DOJ, General Dynamics proffered several arguments to counter the DOJ's claims. This section will summarize the defense of General Dynamics.

First, General Dynamics maintained that United Electric's coal reserves had been decreasing several years prior to the start of the case. The majority of United Electric's reserves had already been committed to electric utilities under long-term contracts. The amount of reserves available for sale in the spot market amounted to 1% in the geographic market established by the DOJ. This caused United to be an inept competitor with diminishing ability to disrupt the market by undercutting price and quantity.

Second, because United's coal reserves were facing eventual exhaustion (the useful life of United's reserves was estimated to last until 1991), General Dynamics maintained that the acquisition of United was legitimate and acceptable under the failing firm doctrine (Moyer 13). This argument would later be rejected by both the District and the Supreme Court, both of which took notice of the fact that United, despite diminishing reserves, was till "highly profitable" (Kitt 268).

Third, General Dynamics maintained that the relevant product market had been too narrowly defined to the point that several energy substitutes had been excluded. This will be discussed in greater detail in the next section.

We shall now examine how the courts viewed the charges of the DOJ against General Dynamics.

Section IV. The Insufficiency of the DOJ's Charges.

At first glance, the concentration ratios proffered by the DOJ demonstrated that the market was severely concentrated. However, the use of concentration ratios cannot be applied to every industry and reflect a realistic image of an industry's current state and structure. According to Richard Gordon, "When the market involves competition among somewhat different goods such as different types of fuels, coals, computers, or packaging materials, share measures cannot be used satisfactorily" (33). Concentration ratios rest on the assumptions that the relevant geographic market has properly been identified, that the relevant product market has properly been identified, and that a company's total sales reflect that company's market power.

We shall demonstrate that all three of the findings of the DOJ were inadequately reached. We shall provide both the findings of the District Court and the Supreme Court, as well as new evidence.

First, on the issue of the relevant geographic market, both courts agreed with the DOJ that the Eastern Interior Coal Province and the State of Illinois were the relevant markets for the sale of coal. This market had been named by the Geological Survey when mapping U.S. coal reserves (Stelzer 168). The market delineation was further strengthened by the fact that coal imported into the EICP was priced as much as 40% higher than coal produced within. However, according to Elizinga and Hogarty, "[p]rice

data generally are not going to be adequate to use in delineating geographic market boundaries" (7).

A LIFO/LOFI test, conducted in 1978 by Elizinga and Hogarty, weakens the DOJ's argument that the EICP was the relevant geographic market. To discover what was the relevant market, Elizinga and Hogarty took the aggregate coal used by each state, and set out to find the source of the coal. In their findings, almost 30% of all of the coal used in Illinois were imported from companies operating in the Rocky Mountain States, none of which are germane to the EICP. Also, Missouri imported 50% of that state's coal from the western states. In addition, Kentucky imported 60.3% from the Appalachian coalfields (16). Clearly, the geographic scope of the coal market was larger than the EICP.

We shall now consider the relevant product market. As has been mentioned, coal was increasingly being consumed by the electrical utilities, who were quickly becoming the largest consumers of coal in the nation. Other consumers included cement companies and railroads, both of which consumed infinitesimal amounts compared to the utilities (Stelzer 175).

The DOJ maintained that coal was a market of energy unto itself (Kitt 272). This was because businesses that used coal in their production processes were not necessarily able to substitute to other fuels. Both the District Court and the Supreme Court disagreed vehemently with this view. On the issue of interbrand competition, the Supreme Court noted that the findings of *Continental Can* "compel this Court to conclude that since coal competes with gas, oil, uranium, and other forms of energy, the relevant line of commerce must encompass interfuel competition" (Stelzer 174, Slade 94). The effect of including other fuels into the relevant product market would decrease substantially the importance of concentration in the coal industry and the ratios that reflect it.

We should amend this section by adding that electric firms relied upon a variety of fuels to generate electricity. Even though coal was increasingly becoming the mainstay of the electrical industry, it should be noted that higher prices in the coal market quickly met with raising price sensitivity (Moyer 11). According to Mann, "[t]here does exist long-term factor substitution of coal for oil or natural gas" (Stelzer 35). The reverse was also true.

The third assumption behind the use of concentration ratios is that they reflect the market power of a firm. The combination of Material Services, Freeman Coal, and United Electric created the largest coal producing entity in the EICP (Kitt 265). This was inferred from the sales that those three firms enjoyed. The DOJ, however, erred in its findings that the united firm (under the hegemony of General Dynamics) constituted a threat to consumers either in the EICP or in Illinois.

Both Material Services and Freeman Coal enjoyed long-lasting reserves. United Electric, on the other hand, suffered from inadequate reserves. The majority of United's coal was committed to fulfilling that company's long-term contracts with Commonwealth Edison

and others. United's uncommitted reserves (those that could be sold in the spot market) amounted to 1% of the unmined coal in the EICP. Long-term contracts constrained United from effectively competing for other such contracts until the existing ones expired (most of which expired in 1991). Statistics of production figures proffered by the DOJ could only imply that that company was successfully fulfilling the existing commitments of the firm. Such figures suggested very little about the competitiveness outside of United's commitments.

The DOJ, when litigation reached the Supreme Court, accepted that United was facing exhaustion of its coal reserves. However, the DOJ maintained that United, like many other firms, could, at any time, acquire the technology to uncover new reserves, thus increasing that firm's total reserves. In court, General Dynamics successfully countered this attack by presenting many witnesses who testified that General Dynamics had financially assisted United in attempting to find new coal reserves on land owned by the latter. This demonstrated that United had no means of expanding its operations given its present amount of land.

Despite the lack of success, assisting United Electric in uncovering new coal reserves was logical for two reasons. Firstly, existing legislation requiring coal firms to return land to its "natural state" would have been an expense whose occurrence could be delayed by uncovering new reserves. Secondly, after the passage of the Federal Coal Mine Health and Safety Act of 1969 (mentioned below), labor productivity in underground mining operations fell greatly. Other reasons also made underground mining unattractive to the coal industry.² For these reasons, General Dynamics was inclined to assist United Electric in finding new reserves. The Court ruled that United Electric might or might not procure additional reserves in the future. However, the mere possibility of this occurring was deemed irrelevant to the case by the courts (Stelzer 269).

We shall now examine how functional analysis was applied to the case and how the courts reached its conclusion in favor of General Dynamics. This requires an intimate at both the coal industry and the companies involved in the acquisition.

Section V. An industry in Consolidation.

The acquisition of United Electric and Freeman Coal was not an attempt on the part of Material Services to gain market power over the coal industry. To understand the reasons behind the acquisition and to assess the probable effects of the acquisition requires the use of functional analysis. Functional analysis differs from industry-concentration analysis in that the latter does not consider the trends of the industry or of the economy. Functional analysis takes these elements into consideration. Therefore, we must examine the coal industry, not just the litigants.

This section will attempt to explore some of the reasons why the coal industry was undergoing tremendous consolidation in the postwar era. The following table illustrates the concentration of the coal industry during the postwar years from 1950 to 1965.

Table II.			
National Coal Production Concentration Ratios			
Year	4-FIRM	8-FIRM	20-FIRM
1950	13.6	19.4	30.4
1955	17.8	25.5	39.6
1960	21.4	30.5	44.5
1965	26.6	36.3	50.1

Chakravarthy, Balaji. *Managing Coal: A Challenge in Adaptation*. Pp. 42.

There were three reasons why the coal industry underwent consolidation during this period. Firstly, in the 1950s, there began a resurgence of demand for coal. This point shall be focused upon more intensely. Secondly, labor productivity was increasing in both underground and deep-shaft mining. Thirdly, the coal industry, prior to the environmental regulation of the 1970s, involved little economic and political risk.

By 1970, the electrical utility industry was consuming two-thirds of all extracted coal (Kitt 266). This contrasted sharply to the 13% that utilities had been demanding in 1946 (Table III). The increasing demand of the electric utilities was offset by the continually falling demand of the railroads that substituted away to diesel fuel (Chakravarthy 37). In 1946, the railroads were responsible for consuming one-fifth of all coal produced. This fell dramatically by 1960 when railroads consumed less than one percent of national coal output (Mann 6).

Table III.	
Electric Utilities' Demand for Coal 1946-1970	
Year	Coal in Thousand Tons
1946	68,743
1947	86,009
1950	88,262
1955	140,550
1960	173,882

1965	242,729
1970	318,921

Gordon, Richard L. Coal in the U.S. Energy Market. Pp. 25.

As the primary purchasers of coal changed from the railroad industry to the electric utility industry, the conditions of the market also changed dramatically. During the 1930s and 1940s, substantial amounts of coal were sold in the spot market by smaller "truck" mines. Production did not require rigorous schedules and quotas. Coal producers could sell coal to prospective purchasers at the mine itself or would sell to purchasing agents who would transship coal via waterway to other marketplaces. With the advent of the 1950s and 1960s, these characteristics would quickly vanish as coal output was placed under long-term contracts to meet the demand of large industrial users.

Utilities demanded that coal production be reliable and continuous (Chakravarthy 45). This was necessary in order to perform on the contracts that had been signed between the utilities and the coal companies. The preference for long-term contracts among utilities had two important consequences for coal producers. The first of these was the need for more labor to insure that coal production reached the amounts needed. This meant hiring coal workers who were younger than the average miner and often relatively inexperienced. A tightening in the labor market resulted with the expected increases in wages (Mann 66).

The second consequence that long-term contracts had on the coal industry was the need for larger reserves (Chakravarthy 51). Utilities would often agree to contract with those coal companies that had a supply of reserves well above the amounts specified under the desired contract. Because coal reserves could only be estimated and not stated with complete accuracy, those companies that enjoyed excess reserves were the preferred suppliers and often won the contract. By contracting with a coal producer whose reserves were in excess of demand, utilities also hedged against the unfortunate occurrence of a producer failing to perform on the contract, wishing instead to sell the committed coal, during times of inflation, at spot market prices that were higher than the contract price (Mann 76). Having a supply of uncommitted coal allowed the coal producers to meet the needs of the utilities and to those profits incurred from higher prices in the spot market.

Increasing wages and the need for larger coal reserves led to a merger trend in the coal industry. The truck mines, numerous in number in Kentucky and the Appalachia, gradually disappeared (Kitt 273). They merged into larger companies and were often acquired by oil companies wishing to diversify. Merging together allowed the coal companies to compete more effectively for long-term contracts. Not only did the size of the reserves increase, the acquired companies could also take advantage of the parent company's technical expertise and capital machinery, which were necessary for expanded mining operations and distribution.

The second reason why consolidation occurred in the coal industry was due to the fact that labor productivity had been increasing for several decades prior to 1969³ (Chakravarthy 43-45). This was due to the adoption of labor- and capital-intensive technology, which reduced significantly the cost of extracting coal. Labor productivity for the coal industry can be seen in Table IV.

Table IV.		
Labor Productivity in the Coal Industry		
Year	Underground Mining	Strip Mining
1960	10.64	22.93
1965	14.00	31.98

Chakravarthy, Balaji. Managing Coal: A Challenge in Adaptation. Pp. 43-45.

Third, the business of coal, prior to the environmental regulation of the 1970s, was neither politically nor economically risky (Gordon 320-21). Government policies towards coal extraction and production were formulated at the state and local levels. Table V illustrates the regulations that governed the coal industry. These regulations cannot be described as burdensome on the industry when compared to the far stricter federally imposed restrictions suffered by the coal industry of the 1970s.

Table V.	
State Regulation of Coal Mining	
Procedures to Obtain Necessary Permits	<ol style="list-style-type: none"> 1. Submission of geological and engineering analyses 2. Submission of plans involving future reclamation activities 3. Written adherence to states' regulatory powers of that industry 4. Posting of bond which would be returned after reclamation activities are concluded
Enabling Legislation	<ol style="list-style-type: none"> 1. Establishment of state-wide agencies to monitor coal operators' activities 2. Granting authority to regulators to apply regulations to coal mines
Severance Taxation	<p>Taxes were levied in order to</p> <ol style="list-style-type: none"> 1. Compensate the public for the environmental damage being done through the operation of coal

	mines 2. Receive general revenues.
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Randall, Alan. Resource Economics. Pp. 219-220.

Economically, coal like other minerals industries, typically performed better than other industries. Extractive industries were, and

still are, less risky than other industries when considering market risk.

There are three reasons for this. First, market failure for minerals has not historically occurred. Second, cyclicity is not a greater concern than for any other industry. Third, fluctuations are less severe for this industry than for others (Gordon 320).

Section VI. Benefits of Acquisition.

The horizontal mergers of United Electric and Freeman Coal with Material Services were symbolic of an overall trend in the coal industry (Schwartz 190). Throughout the nation, smaller firms were combining to become larger firms. The most typical form of merger was between an oil company and a coal company (Chakravarthy 51). This allowed the former to diversify into other areas of the energy industry; the latter benefited by having access to the enormous financial resources of their parent oil company.

Freeman and United, however, did not complement one another in terms of production processes and managerial skills. Freeman Coal was engaged in deep-shaft mining. Deep-shaft mining is capital intensive in nature and employs large amounts of machinery for several decades. United Electric was strip-mining coal. Strip-mining is relatively more labor-intensive than deep-shaft. The machinery needed to carry out these two general forms of extraction differs tremendously. To operate these mines requires managers whose abilities were not translatable from one type of mining operation to another (Moyer 9).

The two subsidiaries did complement one another in an interesting way. As mentioned above, utilities preferred to contract with those companies whose reserves were in excess of the amount specified in the contract. United's reserves had been diminishing throughout the 1960s (Posner 432). This caused United to experience difficulty in obtaining long-term contracts. When the two companies were brought under Material Services' leadership, a portion of Freeman's reserves was allocated to guarantee United's commitments. Thus, through association with Material Services (and, therefore, with Freeman Coal), the marketability of United's coal was strengthened, increasing that firm's ability to compete for long-term contracts, though only in the short-term.

Another benefit can be seen in regards to Freeman Coal. When Freeman was an independent company, that firm had limited access to the many utility firms operating in the Midwest. The range of Freeman's actual and potential customers was within a relatively limited range inside of the Eastern Interior Coal Province. Exporting coal outside of this region was extraordinarily expensive. Freeman and United were not direct competitors in regards to the many consumers of coal.

Ultimately, when General Dynamics acquired control over Freeman Coal (via Material Services), the ability of Freeman to supply a growing number of coal consumers increased demonstrably. The flow of ownership away from Freeman to Material Services and, then, to General Dynamics had a profound impact on the ability of that firm to service new clients. This is particularly true in regards to Edison Utilities in the Midwest. Table VI illustrates the impact that acquisition had on Freeman Coal.

Table VI.		
Benefits of Acquisition Over Time		
Flow of Ownership Of Freeman Coal	Freeman's Status of Ownership	Freeman's Ability to Service Commonwealth Edison Utilities
Freeman Coal	Freeman is an independent firm prior to Material Service's stock purchases.	Freeman was prevented from entering certain markets due to transportation costs.
Material Services	Freeman is informally controlled by Material Services by 1964. A majority of Freeman's stock is bought by General Dynamics in 1969.	Entry into new markets for the sale of coal was rendered feasible by lowered transportation costs made available through association with Material Services. Further association of Freeman Coal and Commonwealth Edison, and other utilities, on a supplier/purchaser basis, proceeds.

General Dynamics		
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To help us summarize this section, we shall construct a Material Capacity (MATCAP) appraisal of United Electric and Freeman Coal. Such an appraisal involves an understanding of both firms in terms of their reserves and their access to finance. Both firms faced different levels of

reserves. United, during the 1970s was depleting its reserves and was

unsuccessfully attempting to uncover new ones. Freeman, on the other

hand, still maintained large amounts of reserves and was not in any danger of exhausting its mines.

As for access to capital resources, any firm, essentially, has three methods of raising the capital needed to expand operations and to replace aging capital. Firms can raise capital through equity, bonds, or allocating internal funds (of the firm itself). Even though the coal industry was especially lucrative and investors were willing to risk their monies, coal companies were burdened by increasing interest rates throughout the 1960s. This burden, though not as severe as was witnessed in the 1970s, decreased the firms' willingness to look for capital outside the firm. Financially rich oil companies proved a wonderful opportunity for many coal companies, many of whom welcomed conglomerate mergers with the former. United and Freeman had access to the tremendous financial resources of General Dynamics. This decreased the level of uncertainty regarding future sources of financing. Based upon the information in the preceding two paragraphs, we can generate our MATCAP which is shown in the table below.

Table VII.			
MATCAP Analysis of Freeman and United			
After Acquisition in 1964			
	Reserves		Financial Resources
	Deep-Shaft	Strip Mining	

United Electric	Low	Medium	Abundant
Freeman Coal	Abundant	Low	Abundant

This table illustrates the precarious condition that United Electric was in even after that firm's acquisition by General Dynamics. United had been unable to find any additional reserves, while, at the same time, the useful life of that company's strip-mines was decreasing precipitously. The MATCAP appraisal also compares United Electric to Freeman Coal, who enjoyed far greater reserves and whose potential to generate revenues was far greater, in the long-term, than United Electric.

The previous two sections have attempted to demonstrate that a) the combination of United and Freeman was a reflection of an ongoing merger dynamic in the coal industry, and b) the acquisition of those firms generated economic efficiencies. Only by combining to form a united company could United Electric receive tremendous access to financial resources to search for additional coal. As for Freeman Coal, that company benefited from acquisition by having the market for that company's coal be widened significantly. The Court's observance of these economic efficiencies makes *General Dynamics* a landmark case in the history of antitrust.

Section VII. The Court's Response and the Legacy of *General Dynamics*

The Supreme Court maintained that the relevant product market had inadequately been defined by the DOJ. The product market broadened substantially when the Court allowed other fuels such as oil and natural gas to be included. The Court also refused the DOJ's notion that United Electric would, at some future date, procure additional reserves, by which that firm would increase market power in the EICP. The Court's rejection of these two pillars of the DOJ's case severely weakened the legitimacy of the DOJ's arguments.

The significance of *General Dynamics*, however, does not rest in the successful rebuttals of the DOJ's ill-founded assumptions. The landmark decision that was handed down in *General Dynamics* dealt primarily with the issue of how should a firm be judged when that firm has substantial amounts of its production committed under long-term contracts. Also, of equal importance is how should a firm be judged when that firm faces diminishing levels of extractable resources. Considering both of these factors weakens the market power and raises the legality of any merger among such firms, because the firm's (post-merger) contribution to concentration within the market is insignificant.

General Dynamics, in association with other cases brought before the courts, contributed to a changing attitude towards the benefits of merger activity. The defendants involved in *FTC v National Tea Co.* (1979) and *U.S. v International Harvest Co.* (1977) have

maintained that market shares should be dropped entirely from the Court's consideration (Turner 1155).

By the 1980s, the move away from strict per se findings towards rulings based on a rule of reason dominated the courts. Despite the DOJ's retention of concentration analysis in their 1982-84 Guidelines, the importance of such analysis had decreased precipitously (Walters 224). The public statements of the Reagan Administration further reflected the more amicable environment towards business (Waldman 124).

This paper has examined the Government's case against General Dynamics. The errors in defining the relevant geographic and product markets and their influence on calculating market concentration have been observed. Also, the paper has provided an overview of the investigation typical of functional analysis. This paper concludes by demonstrating the durable effects of the *General Dynamics* decision on subsequent cases,

Further areas for research include an analysis of the effects *General Dynamics* has had on antitrust law as well as antitrust theory; the development of new methods to delineate geographic and product markets; the applicability of *General Dynamics* in current and future court cases; and types of defenses that have been used to refute market share standards.

Notes:

1: The Eastern Interior Coal Province (EICP) is cluster of states in the Midwest that are involved in the extraction and the production of coal. These states include Illinois, Kentucky, Missouri, Indiana, Tennessee, Iowa, and Wisconsin.

2. During the latter portion of the 1960s and 1970s, the coal unions became more vocal and demanding both at the negotiating level and at the political level. The unions successfully lobbied the federal government for the passage of the Federal Coal Mine Health and Safety Act. Throughout the 1970s, the unions won large

wage increases from the coal companies for those workers primarily engaged in the far riskier extraction of underground reserves.

3: In 1969, the Federal Government, alarmed at the growing number of fatalities in deep-shaft mines, passed the Federal Coal Mine Health and Safety Act. This Act demanded that firms take precautions by doing the following: 1) increased roof bolting; 2) ventilation; and 3) rock dusting. The Act had two effects on the coal industry. Firstly, the Act created a new federal bureaucracy that hired many persons then employed with coal companies. The technical abilities of these individuals were difficult for the coal companies to replace. Thus, the coal industry witnessed a slight tightening in the labor markets. Secondly, labor productivity of underground mining suffered severe losses in part due to meeting the requirements of the 1969 Act. Labor productivity fell throughout the 1970s from 13.76 in 1970 to 8.5 in 1975.

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