Scientific Research Publishing

Modern Economy, 2025, 16(11), 1856-1881
https://www.scirp.org/journal/me
ISSN Online: 2152-7261
ISSN Print: 2152-7245

The Business History of 11 Greek-Owned Shipping Companies with an Introduction to Complexity Theory and Nonlinear Management

Alexandros M. Goulielmos[1,2]

[1]School of Maritime & Industrial Studies, University of Piraeus, Piraeus, Greece
[2]Transport & Logistics Department of Business College of Athens, Athens, Greece
Email: am.goulielmos@hotmail.com

How to cite this paper: Goulielmos, A. M. (2025). The Business History of 11 Greek-Owned Shipping Companies with an Introduction to Complexity Theory and Nonlinear Management. *Modern Economy, 16,* 1856-1881.
https://doi.org/10.4236/me.2025.1611086

Received: May 26, 2025
Accepted: November 21, 2025
Published: November 24, 2025

Abstract

We presented the way by which 11 Greek-owned shipping companies *grew* and we revealed also their strategies since their foundation in 1850 for certain of them. Moreover, we noticed that Greek shipowners were unable to *forecast* the freight markets and to manage properly company's Cash Flow. In addition, we dealt mainly with five main subjects: a) a short historical analysis of Management, b) a brief analysis of the personality of Managers, c) an introduction to Complexity Theory, d) an analysis of the available Business Strategies and e) a critical presentation of the prevailing economic model. Moreover, the two main concerns of Management: "for the staff" and for the "job", were presented, within a *nonlinear* framework. In addition, the way theology confused Management recorded together with the importance of Man's and Managers' "free will". Moreover, the damage that a "major marine accident"—with pollution—may cause to a company, also mentioned.

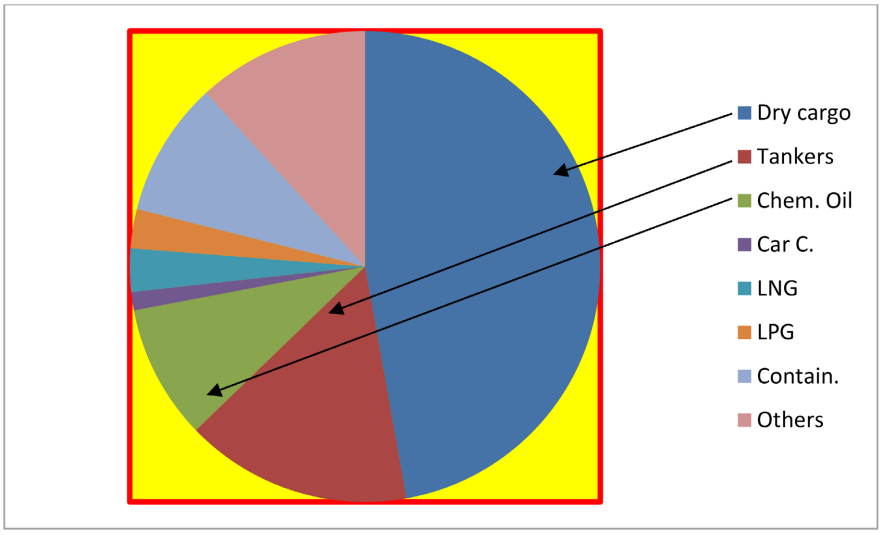
Keywords

The History of 11 Greek-Owned Shipping Companies, A Historical Analysis of Management, The Impact of Theology on Sciences, The Importance of Man's Free Will, The Complexity Theory, The Personality of Managers, The Two Prime Concerns of Management, A Brief Historical Account of Strategies in Business, The Prevailing Economic Model Criticized for Its Fairness

1. Introduction

Eleven out of 164 Greek-owned global shipping companies presented, and their common business strategies revealed. Greeks, in 2024, managed 5691 ships, of 8

main types (Figure 1).



Source: Annual report of the "Union of Greek shipowners", 2024, (July 2025).

Figure 1. The types of ships managed by Greeks, in 2024 in %.

As shown, Greeks managed, by majority, in 2024, *dry cargo* ships, i.e. ~47% of the total, followed by Tankers ~16%, and Containers ~9% (an increased % for the first time). The chemical and the oil products carriers achieved ~9%. The LNG and LPG carriers, together, achieved ~6%, while other types reached ~12%. Finally, the Car Carriers held ~1% (=100% in dwt).

Greece, in dwt, managed about 398m on 01/01/2025 (and 5124 ships). This means 16.4% of the world fleet in dwt, followed by China 14.4% and Japan 9.9% (UNCTAD[1])[2]. *Worth noting is the fact that Greeks pursued more effectively "economies of scale" by having an about* 78,000 dwt *average vessel size.*

Certain analysts argued that the last almost 20 years, the number of the global shipping companies of Greek interests, reduced by about 20%, i.e. from 733 to 588 (2004-2024). In the world of shipping 5,518 companies were registered, in 2004, according to Stopford (2009). This, if it is true, was due to the recent global detrimental developments, we believe: a) the World financial crisis in mid-2007-early 2009—and in 2011-2018 (Greece); b) the COVID 19, 2019-2021; c) the 2 local wars between Palestine and Israel (2023-2025?) and between Russia and Ukraine (2022-).

2. The Structure of the Work

Nine parts follow: Part I, dealt with the business history of 11 Greek-owned shipping companies; Part II, dealt with a brief historical analysis of Management; Part III, dealt with how Theology confused Management; Part IV, dealt with the ques-

[1]The "Review of Maritime Transport".
[2]These 3 Nations managed, therefore, about 41% of the world fleet.

tion: do Managers have a free will? Part V, dealt with an introduction to Complexity Theory; Part VI, dealt with a brief analysis of the personality of the managers; Part VII, dealt with the two prime concerns of Management in a nonlinear framework; Part VIII, dealt with a brief analysis of the Strategies in business and Part IX, dealt with a critical diagrammatic presentation of the prevailing economic model. Finally, we concluded.

3. Methodology

Our aim was to present, as *briefly as possible*, the history of 11 Greek-owned shipping companies, by focusing on their activities after the 2nd WW. These companies belonged to 164 ones (~14% of the estimated total of 1,200), from which 142 told their history in interviews. This was something welcome given that business strategies are rarely told. The companies analyzed, contained small, medium and large companies and their common characteristic was that they were—by a great majority—*family and island ones*.

Moreover, we considered it beneficial to introduce reader into "Nonlinear Management". This term is associated with managing chaotic businesses, like ship-management. We saw that scientists paid, at last, attention to the "differentia" between a new science, called "Complexity[3]", *and the traditional linear one, taught in almost all world Universities for centuries*. Unfortunately, we were unable to connect the business history of the 11 Greek-owned shipping companies with "Nonlinear Management", because this subject taught in one Greek University for the first time in 1992. The author introduced it for the first time in the Department of Maritime Studies of the University of Piraeus (1992-2008-August), and at the "Business College of Athens" thereafter.

Moreover, Management's popular international books with even 14 editions ignored Complex Management by making no reference to it (e.g. Robbins & Coulter, 2018). There are only 3 exceptions, to the best of our knowledge: 1) H. Richard Priesmeyer, (1992), Professor of Management, St. Mary's Texas University of San Antonio (USA); 2) Arthur Battram (1998) (UK) and 3) Alex. Goulielmos, Professor of Marine Economics (Goulielmos, 2002) (Greece).

4. Literature Review

This work is made possible by a number of books, which dealt with the history of certain of the Greek-owned shipping companies: Stokes (1997), Couper (1999), Harlaftis & Theotokas, (2007) (in Greek), Stopford (2009) and Lorange[4] (2009).

[3]Complexity deals with relationships, which *allow* for a *disproportionate response to changes in the independent variable* (Priesmeyer, 1992: p. 15).

[4]Lorange is a rare case of a Professor, who also used to be a shipowner... He, and his co-authors, greatly enriched—since 1974—the maritime literature, and if their English were better, their scientific impact would be deeper.

4.1. Part I: The Business History of 11 Greek-Owned Shipping Companies

This company established in Constantinople. In 1967, it dealt with small *Mediterranean* dry cargo ships[5], and passed—next—on to ocean-going general cargos. In 8 years, by 1975, he managed 200,000 dwt (16 units), with offices in NY and London[6]. The company *shrunk* during *the* 1981-1987 *depression*, and by 1990 managed only 3 general cargos and 1 bulk carrier. By 1995, the company managed 1 unit. *This company achieved a low growth.*

This traditional, island, company established, with a partner, in 1850, with an office in Cardiff (1934), ran by JSF. The four family members: D, P, JF (of S), and their cousin DJF, established, in 1949, a shipping company in London, managing 1 dry cargo ship and 2 Liberties from the 104 "lent-leased"[7] to Greeks. A NY office opened in partnership with AA. The family opened also a Piraeus one. The 2nd generation joined (i.e. the 4 sons of LF), D—*who died young*—M, S and C. The company managed then 13 units (8 liberties, 4 dry cargo, and 1 tanker—newly built in Japan). By 1975, the company managed 363,000 dwt (4 tankers, 5 bulk carriers and 10 dry cargoes). The 4th and 5th generations joined (1980), when company managed also Capes. By 2000, the company managed 458,000 dwt (8 bulk carriers of handy-size, handy-max, Panamax & Capes). Company's policy was to manage *up to a maximum of* 75 *ships* and to avoid the S&P market. The company built 25 ships. It achieved a medium growth.

This non-island company—from "Evritania" (mainland of Greece)—established by NF (b. 1877). He had 4 sons[8]: Ch (b. 1905), G (b. 1907), Ach (b. 1911) and J-N (b. 1913). Ach in 1960 went to Egypt and Sudan and in 1948 to Lisbon, where he started shipping business by obtaining 1 ship with 2 partners. In 1960, the company moved to Athens. It served *Cuba's embargo,* imposed by USA, in 1960, by carrying-out island's sugar. By 1965, it managed 25 units, most Liberties. In 1966, it ordered 33 units… in the Soviet Union, but… it got back only 3. By 1975, the company managed 264,000 dwt (22 units), *but by* 1981, its fleet fell to 5 units (1981-1987depression). It diversified in Tourism, Hotels and Industry (1969; 1972). The 2nd generation joined in 1980, made-up by: NF (b. 1952), GF (b. 1953), Ilena (b. 1956, who studied business administration) and Marily (b. 1958). NF took over, and by 1990, he managed 280,371 dwt (12 units)—most dry cargoes. By 2000, NF and Marily took-over, while G, (a Captain and economist), with a partner, established another company. By 1990, they managed 8 tankers, and 14, by 2000, most tankers. GF (b. 1907) dealt with 3 - 4 small dry cargo ships so that to carry-out the citrus exports. Two grandsons continued company's business together with GF-A (b. 1963) and MF-C (b. 1971). These companies achieved a low

[5]So that to enter next into the global shipping; method followed by a number of Greek shipowners.
[6]Greeks used to establish offices in the capital cities of London and NY, where major maritime developments used to take place. These cities had also "trade exchanges" like the "Baltic" in UK.
[7]This was in recognition of the sacrifice of the Greek fleet during the 2nd WW.
[8]A common pattern of all Greek-owned family shipping companies, i.e. to try to give birth to 3 at least sons...

growth.

This island company created 2 branches: one by Captain EMF (b. 1905) and one by Captain NJF (b. 1926). In about 1950, EMF, bought a small dry cargo vessel. In 1958, he bought another one, with a partner. In 1964, he established 2 further ship management companies. Then, his son M (b. 1945), joined—a student of shipping business in the "City of London College". M was in favor of making shipping businesses "*with many partners in a friendly business environment*". In 1973, he cooperated with NE in London. Their company, in 1980, ordered 2 handy-sized bulk carriers in UK. In 1988, new partnerships, and companies, established. The 2nd branch, in 1960, bought 1 ship. In 1964, it bought an additional vessel in partnership with NM. In 1966, another company established, managing, by 1990, more… than 150 vessels. This was *an example of a company made-up by a quite number of partners (since* 1966…). One of the main partners focused on the 2nd hand market, looking for investment opportunities there (e.g. ships involved in marine accidents). *Company's different departments run by each partner suitable for the job*. This company succeeded to mobilize many Greeks under a single management, something difficult… NF obtained 3 children: J, running a shipping company, since 1990, Angeliki (**Photo 1**) running a shipping company too, and Maria.

Photo 1. The female and top shipowner, running the "Navios Shipping company" Mrs. Angeliki F (used by permission).

ANF managed by 2016, 142 vessels of about 14.5m dwt and in 2018, 180 ships of about 17.2m dwt, being in the first two-three positions among the 77 Greek shipowners owning more than 1m dwt each in 2016... Angeliki (Goulielmos, 2021a) has a background in dealing with finance through listing. Though female managers use their sentimental thinking, they have achieved exceptional growth

rates in shipping. Moreover, Greek Shipping, although considered "males' kingdom", an about a dozen females, excelled themselves by creating large shipping companies the last 30 years or so—who were mainly daughters of shipowners.

This island, traditional company established by APCh (b. 1920). He married the daughter of a shipowner. He, in 1945, together with his father P, bought certain ex-wreck ships. The company ran a Piraeus office (1950) and by 1965, managed 80,000 dwt (12 dry cargo ships). By 1975, managed 550,000 dwt (20 units) from a Piraeus office. During 1970s, the company also ordered ships. By 1981, it managed more than 700,000 dwt (25 dry cargos), running also a London office. The company, however, reduced its fleet during *the 1981-1987 depression*, by more than 6 times[9], i.e. to 115,000 dwt (4 bulk carriers) by 2000. The family then created 2 further shipping companies, established by LPCh, Z & GCh. This last company achieved a low growth.

This island, traditional company established by 2 brothers: D (b. 1921; who passed away at his 59th year) and Antony (b. 1924; who died at his 60th year). Their father, JC (b. 1890), was also a shipowner, passed-away at his 52nd year... D's sons, J and M, took then over. The company[10] dealt with tankers, dry cargoes, passengers and *cruisers*, and with Industry and Tourism… *Company's fleet grew remarkably about* 30 *times between* 1947 *and* 1975 (2/3 *dry cargoes* & 1/3 *tankers:* 1950-1970). The 3rd generation rescued the company from the 1981-1987 depression by *investing mainly*[11] *in tankers,* and *new buildings*, *especially dry cargo bulk carriers* (*Panamax*, *Cape bulk carriers*, *Aframax tankers and VLCCs*). In 1959, the 2nd generation established the "Greece-Australia Line", which expanded by 1963. *Their competitive advantage, in international passenger shipping, was to use* 2nd *hand passenger vessels renovated cheaply at the Greek repair yards*, *by adding also personal work*, *offering a cheaper journey*, *mainly to immigrants for USA and Australia*. The ocean going passenger transport was then a UK Monopoly. In 1980, the family turned towards Cruising and during 1980-1990, establishing the "Celebrity Cruises" (sold in 1997). The "Chandris (Hellas) Inc." company, in 2016, owned 3.97 m dwt (30 units) and in 2018, 31 vessels. It achieved a fast growth strategy (21st position among the 77 Greek-owned companies managing 1m dwt and over each in 2016).

This company gathered all possible exceptions… Its owner, Aristotelis Onassis (1900-1975)—O thereafter—born in Smyrna ("Asia Minor"), when in 1922, it has been occupied by the Turks… His father was a tobacco merchant there. O was not a brilliant student during high school, and showed-off the power of his body. He showed, however, also early signs that he could become a capable merchant. The Greek-Turkey war obliged O to immigrate to Argentina in 1923 (-1942). O felt that he had to prove *his value* first to his father, and secondly to the Greek ship-

[9] *The history of this company is an additional example of the serious damage that the* 1981-1987 *depression caused to Greek-owned shipping.*

[10] The owners established also: a small shipyard, a Cable industry, a soft drinks etc. industry, a beer industry, a sale of cars firm, a number of chain-hotels and certain nautical schools…

[11] Capable shipowners are able to feel, we believe, when the market needs larger and newly-built ships.

owners[12]. O *did not* study shipping business. He learned them *empirically* by having a desk inside the shipping company of the London "Dracoulis family" (from Ithaca). There, O listened to the technicalities of managing ships by London[13] Greeks, and used to read the incoming S + P circulars. O learned, however, how to derive profit from a vessel. O did not ever abandon his calculating machine, found at the side of his hospital bed, where he died. O acted like Einstein—who had his notebook and pencil with him in his bed during his last sleep... Death deprived also Onassis from the possibility to use his calculating machine during the next morning… O understood, however, well, when he was alive, 3 things: 1) the *effectiveness* and *efficiency* of the *economies of scale* in tankers, 2) the very good prospects of oil, after the 2nd WW[14], and 3), how to finance his investments for a faster growth. Further, O understood that economies of scale can be obtained mainly, and effectively, through b*uilding* ships... In fact, O "forced" the German shipyards to build the larger tankers of their time, called "Super"[15]: this was the *M/T* "*Ariston*", 1938... O, particularly, *saw also* the urgent needs of the German and UK shipyards, after their destruction of the 2nd WW, and bet on them. In 1949, *he ordered 16 tankers* (*in Germany*). In 1942, he established a NY office, and he was the first Greek to register his ships under flags *other than the Greek one* (under the flags of Panama, Sweden; countries neutral during the 2nd WW). O in 1947, bought 10 Liberties, (and put them under the Honduran flag), *from the free market, as he was excluded, by the Committee of the traditional Greek shipowners, from buying a number of the 104 liberties* "*lent-leased*". O, moreover, did not lose ships during the 2nd WW—which was one of the criteria. O's companies

[12]O married (1946) the daughter of the Greek shipowner, and money lover, "Patriarch" of all Greek shipowners, Mr. Stavros Livanos. O got an over-aged Liberty as a dowry… Tina Livanos, O's wife, died in 1973, at her 45th year. This marriage, lasting 12 years, "produced" 2 children (Christina, b. 1949, who died in 1988, at her 39th year, and Alexandros, b. 1948). Alexandros died in a private air crash at his 25th birthday (1973).

[13]Certain analysts argue that Greeks learned shipping business from the British, by having offices in the maritime cities of London and Cardiff. Also, they argue that Greeks learned tanker business from Norwegians. True is that Greeks excelled first as international merchants of agricultural products. This was closely connected with global shipping originally. Greeks proved to be good students of the British in what is known "Tramp shipping". Greece's early competitive advantage was its *efficient* and *effective* crews, cheaper, during most times than its competitors, and the use of over-aged ships, plus *capable managers*, knowing how to control ship's costs. The Greek state was helpful at times and harmful at others… Greeks say that Greece's maritime miracle is due to 3 factors: the State, the Crews and the Shipowners…

[14]In about 1900, mankind decided, in USA, to choose gasoline to fuel cars, *though it was not friendly to the environment* (*Goulielmos*, 2018a). After the 2nd WW, the German "internal combustion engine" secured the hegemony of oil by dethroning coal. Natural gas emerged next. The world economies **de**pended heavily on oil, and gas, since then, and their needs grew as time went-by. This dependence is made heavier nowadays by the use of AI (data centers; big data). Oil, gas, water, and pyrite (needed for computers), became the global strategic goods, and the more effective … *weapons to rule the World*. The World now, and for some time, has tried to discover *oil's alternative* so that to save climate (Goulielmos, 2021b). Many fuel candidates appeared so far including ammonia, hydrogen, methanol, ethanol, LNG and others. The winner seems to be the energy generated by the nuclear power using a method known as fusion. Latest research shows USA to have the lead, followed by EU (Goulielmos, 2021b).

[15]The M/T Tanker: "Tina Onassis" 46,080 dwt; the "Olympic Armour" 200,000 dwt.

achieved a remarkable growth rate, however, with offices in London, Greece and Lichtenstein and in Monte Carlo in the past (Table 1).

Table 1. The Evolution of the Onassis Empire in dwt, 1947-2016.

By 1947→ By 1953→	100,000 dwt (after 6 years) 15 units	By 1958→ (after 5 years)	1 m dwt a great leap forward	By 1965→ (after 7 years)	1.33 m dwt
By 1969→	1.6m dwt (est.) (after 4 years)	By 1975→ (after 6 years)—2nd great leap forward—O's death	5.2 m dwt	By 1981→ (after 6 years) – fall	4 m dwt
In 1981-1987 crisis→	Round the 4m dwt —a steady growth	By 1990-2000→ 10 years—fall	1.8 m dwt	By 2001- → **rise**	2.7 m dwt
By 2016→	5.3 m dwt ("Springfield")	By 2018→ After 2 years—the 3rd great leap forward	6.1 m dwt ("Springfield")		

Source: author's archives.

O was well known for investing heavily in industries other than shipping[16], which cannot be characterized as focus. O wrote a remarkable will: his ½ property to be managed by his daughter Christina, and the other ½, to be managed by a "benevolent fund" in the name of his son Alexandros A. Onassis, supported eventually-up by 2 shipping companies: the "Olympic shipping & management SA" and the "Springfield shipping company". This was the first time, in the history of shipping, we believe, when the death of a shipowner, with no male heirs, *did not mean also the end of his business.* Closing this history, we will mention the fact that traditional Greek shipowners—by majority—*were afraid to order ships by using bank finance*. There were examples when shipping companies, (notable the Colocotronis case in end 1972), failed to manage a number of large newbuildings, when market in between fell. Greeks used to put part of their profits, (in the form of retained earnings & depreciation), aside, so that to save the right amount to order a newly-built vessel. *This apparently was a method for a low, long-term, and conservative, growth.* Something, which clearly depended on family's savings and on the financial strength of company's partners, usually family's relatives and friends, and occasionally company's staff. O (and few others) saw this and the risks involved, and built tankers by obtaining *a prior long term charter-party*. The banks, willingly financed such projects, guaranteed by the 7 big oil companies. *This was the way for O to become a pioneer shipping manager by owning millions of dwt.* To gain from economies of scale is not, however, something without risks. O helped by the fact that the demand for oil was expanding fast at his time so that his super tankers could be chartered, till the early 1970s, when the Arabs reversed this. O died in 1975, and he did not face the "tanker crisis" in full, like Niarchos

[16]Fishery (whales), banking, hotels, shipyards, air transport, gold, currencies, tobacco, and real property.

(Goulielmos, 2021c). So, "growing by economies of scale" is a real dangerous strategy, requiring exact monitoring of the long term future demand, *per shipment,* and /or charterer's financial health. In addition, O had, once upon a time, ships ready for charter (laid-up), and at the then increased rates, when few others had (Stopford, 2009). He gained several millions $, but if he was more *patient*, he could gain more. He also failed to make the right prognosis about the opening-up of the Suez Canal (1st closure; 1956-1957), as his friend Gratsos G did. His *competitive advantage* apparently *was his quality services produced by his numerous newly-built, and well maintained thereafter, tankers*. Onassis was also a Master in Public Relations. The history of the business life of O raises, however, at least, one question: "can the success of a shipping company be attributed exclusively to its shipowner, or could it be due exclusively to the quality of company's staff/crew?" B*oth* are required, we believe … O recognized that his staff was also a source of new ideas, fact which he used to exploit (Goulielmos, 2021a, 2021d). O was also a superstitious[17] personality, by coming from East, but he had one important skill: "to find ways, by studying—day and night—with his lawyers—of how to overcome an obstacle put there by either the circumstances or the people".

L.Ch (b. 1928 in Cyprus) established a company dealing with the business of S Arabia. In 1959, he became a shipowner by obtaining 2 dry cargo ships. In 1970, he specialized in tankers bought from the 2nd hand market. By 1995, the company managed more than 140 ships... The company grew fast in 1980s, by exploiting the *Persian Gulf War* (02/08/1990-28/02/1991). In 1981, the company managed 898,000 dwt (18 units) and by 1987, 3.2m… LCh had 3 children: Polys, b. 1959, Stelios, b. 1967 and Clelia, b. 1970. *The company, however, became a victim of a serious marine accident which took place in Italy* (*Genoa*), *caused by one of company's VLCC, the "Haven", in* 11/04/1991, *with* 6 *dead and pollution. As a result*, the company, by the 1990s, reduced its fleet by selling-out its ships, and its owner withdrew from management, gradually, passing it over to his 2nd generation. His son Polys, in 2000, managed 1.2m dwt (15 tankers) made-up by 2nd hand ships. Stelios in 1992, managed tankers too and he used to buy 2nd hand ships of a rather low age, initially, and then to build new ones (30 units; handymax, Panamax; 6 years average age). In 2001, his company listed in NYSE. Stelios diversified also in air transport. The above companies achieved a fast growth rate.

This is an old, traditional, island company, established by 2 Captains: Elias (b. 1858) and Pavlos (b. 1869), who run also a London office (1920s). The 2nd generation continued family's tradition, made up by: EECh, Calliope (wife of the shipowner and Mentor of the Greek shipoweners, Man. Kulukundis) and Thetis, who married ADM—a shipowner too. Emmanuel, during 1950s, ordered 4 dry cargo ships and 1 tanker. By 1965, he ran a London office and a Piraeus one, managing 130,000 dwt (4 dry cargoes and 1 tanker). The 3rd generation took over, with a younger Elias, and Eugenia. Elias worked in the London office, since 1970, and

[17]O *avoided death*—in an air plane crash after he was unable to find a ticket… His personal secretary was employed when drachma devalued…

ran a Piraeus one, and in 1971, he founded a liner company (the "Arrow Line") managing 5 - 6 dry cargo ships and reefers (-1985). The two brothers, Emmanuel and George (b. 1912) established a 2nd shipping company dealing also with textile industry, in end-1940s, in a Greek island. In 1947, the 2 brothers bought, with ADM, 1 of the 104 Liberties lent-leased. GPCh, in 1950s, continued with a single ship till 1959. Calliope married JEB (b. 1920), who together with his brother M (b. 1924), and two others, in 1965, established the "Helikon Shipping" (in London) and the "Pavar Navigation Inc" (in Piraeus). "Helikon" managed 577,349 dwt in 2016, a medium growth strategy.

This company established by VCh (b. 1933), who followed, in 1953, his brother, and shipowner, in S Arabia. In 1959, he established the "Troodos" company with partners. In 1963, he went to London, and in 1965, he founded his own company, by *splitting up* from his brother. This company, named "Alassia", managed, by 2016, 95 ships of 564,038 dwt (1960s: 4 units; 1973: 9 units; 1975: 5 units of 82,000 dwt) specializing in dry cargo ships. After 1976, the company dealt also with the cement trade of S Arabia (1976-1979). In 1980, he renewed his fleet, till 1986. Polys—his son—joined in 1990. Alassia built ships in 1993 in Samsung shipyards (3 Panamax bulk carriers). In 1995, VCh established the "Safety Management Overseas" (Piraeus). His son Nikos joined in 1999, when the company ordered 12 Panamax bulk carriers in "Tsuneishi" shipyard (Japan[18]). Polys and Nikos took over company's management thereafter. Alassia achieved a medium growth strategy.

This traditional and island company established by family's 2nd generation, where the father, CH, was also a Captain. The 2nd generation was made-up by: John (b. 1888), Nikolaos (b. 1890) and Adamantios (b. 1893). They run a Piraeus office (1938). After the 2nd WW, the family established offices in London and NY. In 1947, they bought 2 Liberties from the 104 lent-leased. The 3rd generation also, from Piraeus, joined, by having university education. This family used to form business groups (in 1969) with other shipowners[19], all coming from the small Aegean island named "Aignousa". Twenty companies at least formed a coalition so that to buy bunkers, lubricants, spare parts, equipment, and to make favorable insurance and chartering agreements. JKH founded, in 1952, in London, a company staffed by his 4 sons: Constantinos (b. 1920), Markos (b. 1931), Nikolaos (b. 1932) and Pantelis (b. 1937). In 1969, they opened a Piraeus office by establishing the shipping company "Archipelagos". This company managed over 200,000 dwt (1 tanker, 4 bulk carriers). In 1980s, the company managed 6 units and in 1990s, 4. The 4th generation joined, since 1970-1980, made-up by John (b. 1950), in partnership with his uncle NML. They established the "Dorian[20] (Hellas)" company (in 1976), managing 300,000 dwt (5 tankers); in 1982, it managed 800,000 dwt (7 tankers)... In 1985, *the company renewed its entire fleet by scrapping its old tank-*

[18]The Japanese, we believe, produced steel plates having a longer average life than hitherto, saying of over 34 years. *This enabled them to charge a rather low price for the entire vessel.* They aimed at gaining from selling thereafter overpriced spare parts… boosting their trade balance as well.
[19]Six families joined, namely: Pateras, Laimos, Hadhipateras, Lyras, Kollakis and Samonas.
[20]Managing 1.42 m dwt in 2016, and specializing in LPGs…

ers and obtaining ships larger and younger[21]. By 1990, and till 2000, the company managed 700,000 dwt (3 tankers)… Another branch—from AKH—who married the daughter of a shipowner—established in London the "Harry Ch. Brothers" company (1960). In this, H's son C (b. 1921), took part, who married the daughter of a shipowner, and John (b. 1926), who also married the daughter of a shipowner, and run the Piraeus office. This managed 4 dry cargo ships (1960-1980) and later ran by KCh. NKCh stayed in NY till 1960, together with his son Kostas (b. 1920), who married the daughter of a shipowner, and his brother-in-law DPD (b. 1923).

The above companies represent many cases where males from a shipowning family were married to daughters of other shipowners... In the above 11 case-studies few split ups have taken place however. Notable is the fact for the above companies had up to 4 generations…

We will now summarize this part in Table 2.

Table 2. Summarizing 4 main characteristics of the above 11 Greek-owned shipping companies.

Company's number	Size dwt	Growth	Diversification moves	Major downturn effect	Remarks
No 1 (1967)[22]	200,000, 16 units (1975)	Low	From small sized ships to ocean-going ones	The 1981-87 depression: by 1990 4 ships; by 1995 1 ship	NY, London offices
No 2 (1850)	458,000	Medium	London, Piraeus offices	-	Island; 4 sons, in favor of newbuildings
No 3 (1897)	280,371, 12 units	Low	Cuba's trade of sugar; Tourism, Hotels, Industry, Citrus trade	The Soviet shipyards failed to deliver 30 ships; down to 5 unit by 1981	Non-island; 4 sons
No 4 (1925), 1950; two branches 1946	1990 more than 150 ships	Fast	-	-	Island; plethora[23] of partners; London office; 3 children
No 5 (1940)	700,000, 25 units	medium	Ex-wreck ships	Reduced during & after the 1981-1987 depression to 115,000 dwt by 2000	Island; inter-owners marriages; Piraeus & London offices
No 6 (1941)	3.97 m by 2016, 30 units	30 times (1947-1975); fast	Industry, Tourism, Cruising, Passengers	-	Island; traditional company; rescued from 1981-1987 depression by building new & larger ships

[21] *Company's policy in renewing its entire fleet was one of "win-win", followed by all successful Greek shipowners.*

[22] The year of establishment of the company is estimated at the 20th year of age of the owner.

[23] Greeks applied the management principle by placing each suitable partner at the proper place. Surely the element that made these multiple Greek partners to cooperate in harmony was their common birth place.

Continued

No 7 (1928)	6.1m Springfield company in 2018	Fast, with other people's money	In 9 other industries and goods	The 1st oil crisis	Economies of scale; newly built tankers; Public relations; belief in oil since 1938
No 8 (1959)	150 ships by 1995; 898,000 1981; 3.2 m by 1987		Stelios in Air transport & NYSE; Polys 1.2m dwt in 2000	A major marine accident with M/T Haven	S Arabia businesses; Persian Gulf War; 3 children
No 9 (1878); 1950s	1965: 130,000 dwt; Helikon shipping 577,349 in 2016	-	-	-	Arrow Line 1971
No 10 (1965)	2016 564, 038; 1975 82,000		Polys in 1990 joined & Nikos in 1999		Saudi Arabia; cement trade 1976
No 11 (1947)	Specialized in forming multi-partners companies from people coming from the same island (1969)	200,000; 300,000 Dorian 1976; 800,000 in 1982; 1985 renewal and 700,000; 1960 2nd branch			Traditional, island; Piraeus, London and NY offices; three to 4 generations; 4 sons

Source: author.

4.2. Part II: A Brief Historical Analysis of Management

Management started, in book form, for the first time, in 1911. It has been heavily influenced by the principles advanced by Newton (1642-1727) and Descartes (1596-1650). These two argued that "*the equilibrium of any system*" *is* "*its natural state*" (Goulielmos, 2018b).

4.2.1. The Concept of Equilibrium

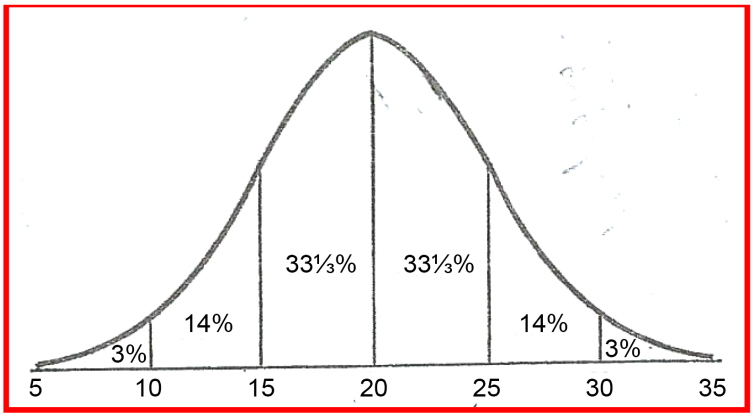
Economists defined "equilibrium"—*a term borrowed from Physics*—as that state, when the *market players have no motive—coming from either those they demand, or from those they supply, goods and services—to change their actions.* Equilibrium further means, for the economists, that the quantity of goods demanded, Qd, and the quantity of them supplied, Qs, in the market, are equal, (*Qd = Qs*) (*clearing the market*).

Enterprises are, therefore, satisfied, according to economists, from their decisions concerning the quantity produced, and brought to the market, **if** that quantity is *sold* at a price *maximizing their normal profits*… Keynes (1936) assumed that enterprises determine their Q_{t+1} production by subtracting from it the previous unsold quantity $Q_{tunsold}$, or $Q_{t+1} = Q_t - Q_{tunsold}$ (1).

The way *equilibrium* defined, it entails, a "*balance of forces*", we believe, because the *motives* of the buyers, and those of the sellers, are clearly *opposing*. Price is the mechanism, which *adjusts* demand to supply. This mechanism is surely not welcome—by the consumers—when it produces monopoly prices... Demand is the independent variable and supply is the dependent one.

4.2.2. Man's Free Will

Given Man's free will, Prices can be very high, at times, and very low, at other times, depending on the total quantities demanded and supplied! It is thus apparent that the economic system is liable to create *fluctuations, and frequent instabilities, known as economic crises and depressions* (Goulielmos, 2020), (Goulielmos, 2022). As a remedy to cycles and fluctuations, we will propose to economists to adopt the 'normal prices', which can easily be derived from a '*normal distribution of prices* per good/service' (**Graph 1**).



Source: author; as shown the actual price can be ~33% lower, or higher, than the "average price" in a maximum probable deviation of 1σ (σ stands for the standard deviation).

Graph 1. The Normal distribution of the prices of consumer's goods proposed.

If economists had adopted the above mechanism, Prices then would vary maximum ± 3σ from their mean… This outcome provides a market without large price fluctuations and can be recognized as fair.

4.3. Part III: How Theology Confused Management

Old scientists, like Aquinas, T, (1225-1274), a Dominican friar, and the Physiocrats (18th c.), believed in "*Natural Law*". Natural Law is a set of rules *imposed* by *Nature on Man,* being also immutable. The term "natural" subsequently interpreted, *arbitrarily*, we believe, *as something* "*normal*" *and as something* "*just*". *E*ven prices—which are clearly a suppressing—demand—down mechanism—found natural—provided prices fluctuated round the *value* of a good—known as a "long-run *equilibrium*"…

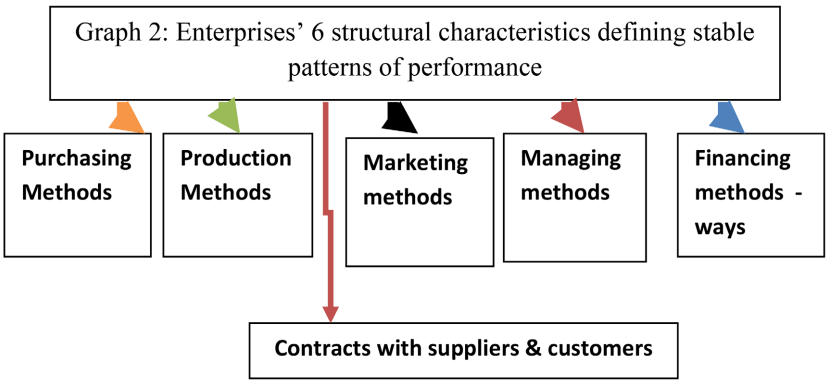
Smith A (1776) (1723-1790) also accepted the "naturalist philosophy" by advancing the concept of the "invisible hand[24]"… He argued that "the enterpriser, who looks after his own gain, is led by an *invisible hand* to promote the interests of the society"… (italics added). We may consider the above statement as more true, only, if supplemented by the remark that enterprises supply goods/services by *looking for a profit, the upper level of which depends on supply and demand.*

[24]Smith A (book 4, chapter 2, in his book: "the Wealth of Nations", 1770).

4.4. Part IV: Do Managers Have a Free Will?

The "free will", mentioned above, is an obvious privilege of the Managers. Managers, as we say, are "those who decide". Managers, no doubt, are those who decide whether or not to take an action, and what kind of action to take. Managers are those who decide also company's future even when they have to replace the unattainable "forecasting" by the attainable "visioning"!

This whole situation—i.e. of the existence of the free will—is not as *hopeless,* however, as it sounds: because enterprises have 6 *structural* characteristics, or *standards* (Graph 2). Enterprises are able to define their patterns of performance, which is something creating a *degree of stability* in the complex business environment we live. *An environment that becomes more complex as time goes-by.*



Source: author; data from Priesmeyer, 1992, p. 174.

Graph 2. Enterprises' 6 structural characteristics defining stable patterns of performance.

The old ways, by which a system could be understood, were *reduction* and *determinism* (Battram, 1998: pp. 20-21). This led to the prime conclusion that by understanding the *elements* of a system, and the manner in which these elements interact, *the future states* of it *can be predicted*. The human beings, in their business activities, and not only, sought desperately to *predict the future*... Millions fell so far, financially, and spiritually, victims of the various astrologists, mediums and fortune tellers, and their likes, guided by the devil.

Management theorists, like Fayol (1916), were in favor of certain management *control* mechanisms (Table 3), based on the idea that enterprises are machine[25] metaphors (Morgan, 1986).

Table 3. Fayol's and others' Management Tools, 1916.

Plans (mean Planning)	Budget (means budgeting)	Management (means by objectives)

Source: author.

[25]At a time of intense *mechanization*, when machines showed certain desirable merits like: continuous function, no objections, and claims for overtime, no resort to strikes and no claims for pay rises etc. Managers thus believed that their staff could, or should, perform like machines…

The above is a *centralized*, *bureaucratic*, structure, which passes the "command & control" instructions from the manager to company's staff. The controls here are explicit: the monetary rewards and punishments, which are also nowadays the common means of *motivation*.

Reductionism produced further 8 concepts (Table 4).

Table 4. The 8 further concepts of reductionism.

"Division of labor"	The "tasks" idea	The "interchangeability of parts"	The "standard procedures"
The "quality & safety controls"	The "cost accounting"	"The time *&* motion studies"	The "organizational charts"

Source: author.

Management thus dominated by an amalgam of ideas, taken primarily from *economics,* and from the *philosophy of science,* known as the modern "paradigm"[26].

Taylor, F.W., (1911), integrated certain of the above ideas in what he called "Scientific Management", in his effort to apply a *coherent* management philosophy. He believed in the "social system's *determinism*" and in that firms' management could be *predictable*. Wheatley (1994) connected the following concepts with the effort of the enterprises to maintain their *equilibrium* (Table 5).

Table 5. Wheatley's connections of the equilibrium to 4 management concepts.

Budget	Performance reviews	Audits
Standards		

Source: author.

4.5. Part V: An Introduction to Complexity Theory

Complexity—the New Science—built-out mainly in 1995, or between 1992 and 1996, in our opinion. Its implications, however, on *enterprises,* were massive. And this, despite the fact, that the "complex systems" had "their *unpredictability* built-in". Important was also that the previous "*certainties*" *of the* "*command & control*" *approach to management had completely abandoned*...

In Complexity, there is a *bonus,* however, in the form of some powerful (suggested) steps, which *enterprises* can take *in moving forward*. Complexity and Time we can say move together, as a general rule, in what we mean by the term *Evolution*. Boisot (1995) suggested 2 ways to deal with complexity: either "reduce it", or "absorb it", where the 2nd way is now recommended, and historically, the

[26]This is a set of preconditions we bring from the past to every new situation we have to deal with; it is the lens through which we look at the world and we determine what we perceive; a set of beliefs or assumptions, we make about the world—beneath the level of our awareness—and so never questioned (Stacey, 1996).

only available...

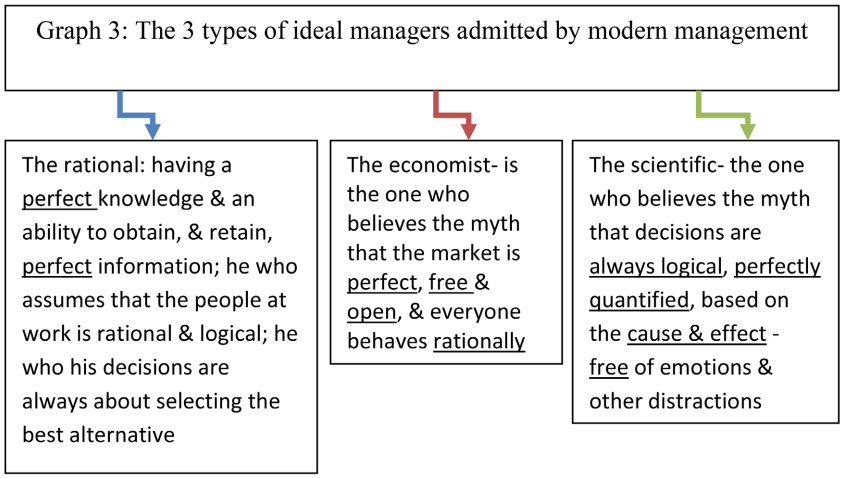
Modern global management (Robbins & Coulter, 2018) wrote only about tasks' "complexity" and the one found increasingly in the business environment, (which produces uncertainty), and which influence groups' effectiveness.

4.6. Part VI: A Brief Analysis of the Personality of Managers

Managers wish to be *rational*, where Rational means to be *logical*. Other terms, like to be *sensible*, *methodical*, *rigorous*, and *systematic* are considered synonymous. Simon (1955) described managers' "bounded rationality", as meaning the "rationality restricted by the existing severe constraints on managers' ability to *make (rational) decisions, especially when there are conflicts of interest and lack of data*"... The lack of data is expected to be eliminated by the energy-hungry "data centers"... and "Big Data".

No doubt, management first sought-out to be… a Science. Its theorists analyzed first the substance of the "natural sciences[27]". Their methods were to find-out parameters, and principles, so that to *adopt them in their own work*. The influence of economics e.g., was serious, including in particular nowadays the so called "competitive positioning[28] approach to strategy".

The modern management thinking admits 3 types of ideal managers: the "Rational", the "Economic" and the "Scientific" (**Graph 3**).



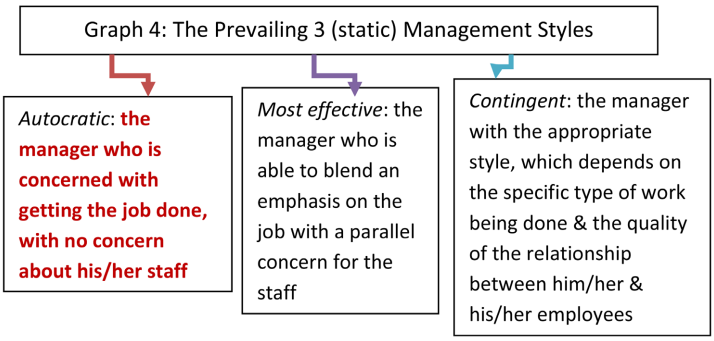
Source: author; data from Battram (1998) (pp. 94-5).

Graph 3. The 3 types of ideal managers admitted by modern management.

Moreover, the 3 prevailing management styles are (**Graph 4**):

[27]"Nature" and "Universe" were the first to be studied-out. These made-out by a Superior Mind: the "God". His perfect laws obviously *had* to be applied to human societies... Humans failed to understand—till nowadays perhaps—that they were "*privileged*" with a *free will* (Priesmeyer, 1992: pp. 174, 238-239). Economics e.g., we believe, wrongly *dreamed*, to be like Physics—by proving its axioms and theories by experiments and mathematics... The Free Will made all sciences dealing with Man more complex so that a new science, called Complexity had to appear.

[28]Meaning *how* and *on what basis* an enterprise is going to *compete*.



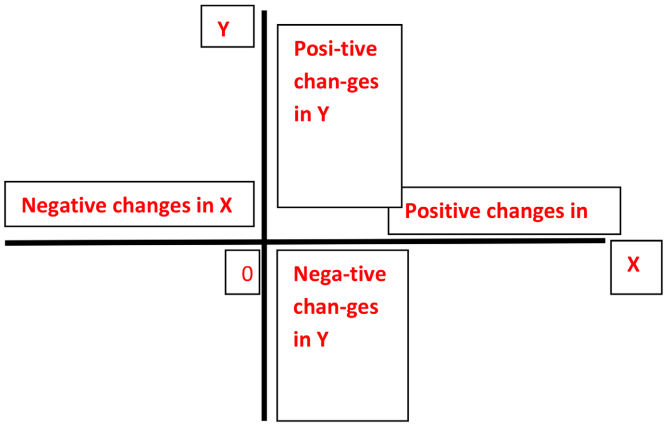
Source: author; data from Priesmeyer (1992: pp. 158-159).

Graph 4. The Prevailing 3 (static) Management Styles.

The first style can be met easily also on board; the 2nd seems to be the *desirable one*. But more *promising*, and more *dynamic*, however, to which we personally subscribe, is the 3rd style, i.e. that of the "contingent manager". He emphasizes the relationship between him/her and his/her employees: "*one of respect and sympathy or one of envy and dispute? Important is for a Captain to be a contingent manager.*"

4.7. Part VII: The Two Prime Concerns of Management in a Non-linear Framework

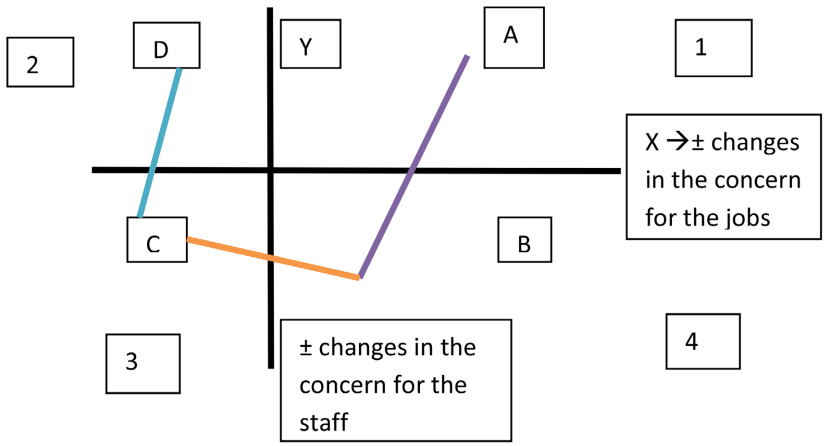
The phase plane (**Graph 5**)—which we will introduce next-refers to the domain in which a system operates; it provides an arena for the system's performance; it is the home of a system's attractor. E.g. when we study a company's market share, there may be only 2 essential characteristics to the system: our company's share X and the share of one major competitor (1-X). The horizontal axis of a four-quadrant Cartesian plane, may host the independent variable X and the dependent variable Y.



Source: data from Priesmeyer (1992: pp. 18-19); Smale St. (1967) was the one to decide to map the changes, which a system undergoes.

Graph 5. A phase plane showing company's market share vis-à-vis the share of its major competitor.

We will place now the "changes in the concern of enterprise's management for the various jobs/tasks" on the horizontal axis, and the "changes in the concern of management for its staff" on the vertical one, on a 4-quadrants Descartes diagram, so that to derive a "phase plane" for the *dynamic* behavior of a company's *management* (Graph 6).



Source: author; inspired by Priesmeyer (1992: p. 159).

Graph 6. The relationship between changes in Management's concern for the job/tasks and changes in its concern for the staff.

If, now, a company is found in Quadrant 1, and at point A, this means an *increased ability* of its management to *integrate* the two concerns: i.e. at A, *both* "concerns" have increased. In Quadrant 2, and at point D, the "jobs" have received a lesser concern. In Quadrant 3, and at point C, the ability of management to integrate the relevant concerns, diminished, as *both* concerns have fallen. In Quadrant 4, and at point B, the *concern* of management for the *jobs* increased.

Point A is, apparently, the desirable position for a management to be. At point A, both the dog has been fed-out and the pie has not been consumed. The above nonlinear analysis indicates that the *exclusive* concern of management for company's jobs/tasks, on the one hand, and its *exclusive* concern, for the staff/crew, on the other hand, is not recommended...

The concern for the staff/crew must be followed by a consequent increase in crew's/staff's *productivity*, we believe… and the concern for the jobs must be followed by an increased *net profitability*, we further believe…The right old principle of any management decision was that the *cost* of any decision to be below the monetary *benefit* from it.

In the large Greek shipping companies, management has established a loan policy for the staff and the crew, advances to them, financial help for cases of staff's medical situations, an extra pension scheme, as well the possibility of the staff to buy companies' shares. Care is also paid in cases of a marine accident, with dead, by company's Social Worker. The large shipping companies also pay "stand-by wages" to their crew—temporarily out of employment and the so called seniority

bonuses. Care for company's staff and company's crews, makes one large shipping company to *differ* from the others by boosting its reputation among the members of the shipping community. Large companies also allow senior crew to have their families with them on board for say three months.

4.8. Part VIII: A Brief Analysis of Strategies in Businesses

Management always wanted to know *how* enterprises achieve *profitability* (and *market success...*). Especially, it wanted to know what *strategies* have been adopted by *the most successful* enterprises (Besanko et al., 2017: pp. 2-3)… Shipping managers frequently asked also the same. One school of thought, considered that the key to success can be identified by *watching* (and *then copying*) *the behavior* of the *successful enterprises*. This is something we saw also to happen in shipping industry.

A 2nd school of thought—i.e. that studying the "best enterprises"—had 4 representatives: 1) Peters & Waterman (1982), who studied 43 enterprises, which had a long-term superior performance in *profitability* and *growth*. These enterprises shared certain *common qualities* shown in **Table 6** (first 3). 2) Wiersema (2001), who identified the behavior of the leading enterprises in the "new economy[29]", with an average annual return of 48% (**Table 6**). 3) Collins (2001), who studied the characteristics of 11 enterprises, which had a long pattern of *good performance* and entered into a 15-year period of great performance (their stock's return was 3 times that of the general market) (**Table 6**) and 4) Watts (2011).

Table 6. The 12 characteristics found in the most successful enterprises by five authors in 1982, 2001 & 2011.

Be as close as possible to your *customer* (*)	Stick to the business you do better (**)	Have a bias to act (***); (Keynes' animal spirits)	Be skilled in segmenting the markets (****)
Advertise intensively (5*)	Outsource *all* but *core* activities (focus) (6*)	Have a leader working hard (7*)	Place the right person in the right post (old principle)—challenged by Watts (2011)
Use technology to support company's strategies	Confront the brutal facts & determine what to do	Use "common sense"—challenged by Watts (2011)	Follow the "proof by assertion"—challenged by Watts (2011)

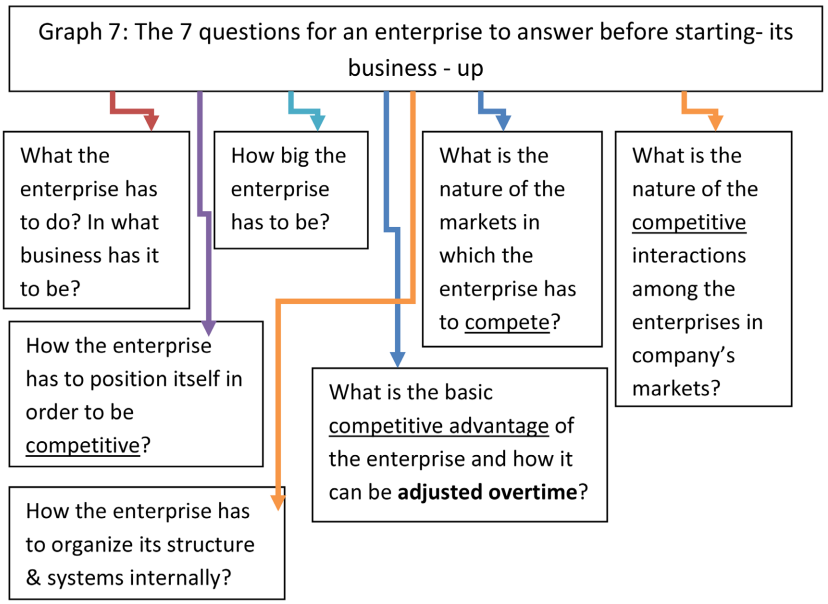
Source: author; data from Besanko et al., (2017: p. 2).

(*) in shipping the customer is the charterer, who requires, among other things, safety; (**) shipping companies—for a number of reasons—may be better managers in certain types of ships (dry cargoes) than in others; (***) this property is subject to a lot of discussion, but perfect "timing" is better to be together with "acting"; (****) of minor applicability to tramp shipping; (5*) of minor applicability too; (6*) applicable; (7*) as well as the rest 5 properties are applicable to shipping as well, where the selection of the Captains is the most important due to "management by distance".

[29]The ones focused on Internet, technology and telecommunications.

As shown, Watts (2011) warned managers for their decisions based on "common sense", by making reference to Gladwell (2006), who claimed that "social epidemics launched by a *few* exceptional persons, who possessed the ability to make ideas go viral". This means to pay only few heavy influencers so that to push new products. Watts (2011) found-out that unexceptional people can exert effectively social influences. He challenged also the principle: "put the right person in the right place" and the "proof by assertion"…

Besanko et al. (2017) suggested a *framework for the strategy of the enterprises*, with a heavy emphasis on those that are about *to start-up* (Graph 7), we believe.



Source: author; data from Besanko et al. (2017).

Graph 7. The 7 questions for an enterprise to answer before starting—its business—up.

As shown the main *agony of the enterprises, nowadays,* is how to face existing *competition* in their markets (57% of the above questions). Important, however, is also to have an adaptive *competitive advantage*. For shipping companies this means: "lower cost services than one's competitors, in safety, meaning quality".

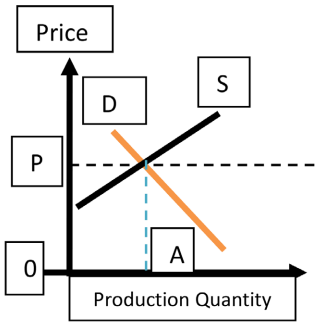
Most shipping companies start with 1 ship, and then expand. Greeks used to deal with the so called "tramp shipping"—the simplest and lower cost shipping companies, *requiring* only one unit. This was done by necessity due originally to lack of adequate own capital, based only on their know-how, as people coming from the Greek islands...

Greeks organize their companies in departments, by creating teams of ships, so that large companies to *focus* on a *lower number of ships per operator*. The operator, (middle manager), had to manage his ships *efficiently* and *effectively*, by delivering better services to Charterers. Competition on Price is not possible in shipping. It is competition on quality, meaning safety, and on cost, meaning size

(economies of scale) and lower cost, meaning too economies of age, in a perfect timing (Goulielmos, 2021e).

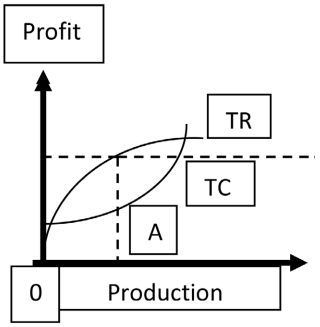
4.9. Part IX: A Critical Presentation of the Prevailing Economic Model

Economic Theory tells us about the *equilibrium* of an enterprise, and about the *equilibrium* of a consumer (Graphs 8-10).



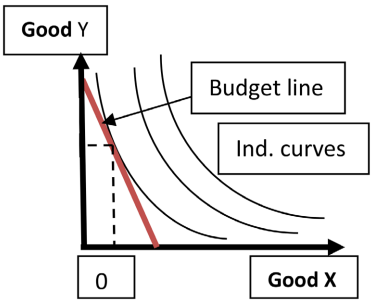
Source: author.

Graph 8. Price determination of a consumer's good.



Source: author.

Graph 9. Enterprise's maximum profit determination.



Source: author.

Graph 10. Consumer's equilibrium by maximizing his/her utility.

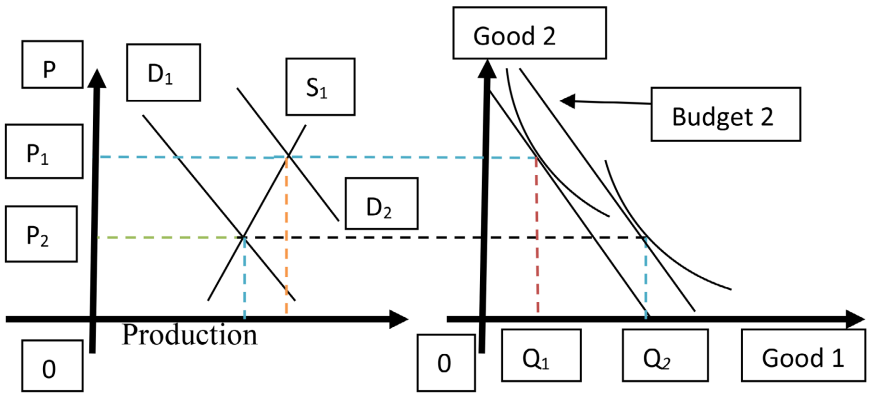
As shown, D = f (P) (3) and Supply = f (P) (4), where D stands for demand, S

stands for supply and P stands for price. These two functions determine, *together,* the price of a consumer good (Graph 8) and its quantity produced. P and the quantity produced determine together TR (total revenue). TR is equal to Production 0A, times P, i.e. TR = 0A x P (5). The quantity (0A) is expected *to* permit to producers to maximize their profit vis-à-vis their total cost (TC) (Graph 9).

The consumer's equilibrium needs his/her indifference curves. The Consumer here is shown to be concerned *not about the* level of the *price, determined already*, as he/she should, we believe, *but by how to allocate—in the best way—his/her disposable income between two goods X and Y* (Graph 10). The theory suggests to the consumer to target at the higher indifference curve laid on RHS.

Graph 10 shows, indirectly, the prices of Good X and Y, given consumer's budget line. It cannot show the prices of the remaining goods and services, which may be purchased by the consumer, (by having a graph of only 2 dimensions). Consumer's utility, however, *may be seriously lower*, if prices went up (known as "the law of demand"). The above is surely a static picture.

If we pass on to a more dynamic, "comparative-static", analysis, the picture we get changes completely (Graph 11).



Source: author.

Graph 11. Consumer's equilibrium in comparative statics.

As shown, when the price is determined at its high level, P_1, the quantities purchased by the consumers are lower, Q_1, compared with the quantities purchased, Q_2, when prices were at their lower level (P_2), though we assumed also that his/her income increased (budget line 2).

5. Conclusion

Greece since 1850 has created 1200, rather *small, global personal family shipping* companies, managing about 5 ships each on average. Moreover, the "25+ ships per company" group found as the *typical* size of the Greek-owned shipping companies in 2024.

The largest companies, however, i.e. those *managing 1m dwt and over,* were 85 in 2024, (+ 10.5% since 2016). These used to manage 80% of the fleet since 2017.

The above class of companies interested us all along in particular (Goulielmos, 2017), because of their exceptional size, making Greece 1st in the world in maritime endeavors. Moreover, we saw that the number of Greek-owned shipping companies in this class *increases* from year to year by about 1.2% p.a.

The Greek-owned fleet, in 2024, managed ~489m dwt, where the companies with *more than* 25 ships, were 60, managing 337m dwt, or about 69% of the total (5.62 m dwt each). Moreover, the "Greek Tramp Shipping[30]" produced 85% of the total "world ton-miles", by serving 176 Nations (91% out of 193)[31]. Namely, Greeks held *the* 1st *position among the cross-traders of the world.*

Greek shipping obtained *42% additional ships* since 2015, arriving at 20% of the world total and 61% of the EU fleet (in dwt). Greeks, as well as other Nations, i.e. China, 2nd, Japan, 3r, and Singapore, 4th, "*helped*" *in their recent growth* by the *rise* of the Seaborne Trade, which rose by 12.6b tons during 2023-24.

The 11 companies analyzed followed uniform patterns and… committed the same mistakes. This seems to be the price paid by the companies for sticking to "Country's Maritime *Tradition*". Studying one Greek-owned family shipping company is like studying all of them. So far we have presented 164 companies in 2025 in Modern Economy out of 1200 (est.), a sample which we consider it to be capable so that the reader to draw his/her main conclusions for the entire industry.

Given that the concern of management for the staff and for the crew entails costs, we recommend to managers to use part of company's *net profits* for this task, and not to *increase company's expenses*. This may act as an additional motivation for them to become more profitable…

The motive of "maximizing profits" will always inspire persons, we believe, called entrepreneurs, to supply the society with goods and services, and thus to satisfy, the plethora of its needs. Profit is thus required. Smith A, however, invented the invisible hand, but he could better, however, determine what the "normal profit" had to be, and to state whether it is fair for any society to allow for "supernormal" or "monopoly" profits…

Moreover, **if** the old scientists were cleverer than what they have been, by accepting: 1) that "*all non-human issues*", are subject to a number of wise and immutable laws, and 2) that the "free will", however, was, and is, the privilege of Man in all "human matters", all sciences would *have been different, we believe, and especially economics*. A lot of time, and substantial resources, have been wasted, however, so far, and *now we believe we have to start from the beginning*. The above omission led clearly to the destruction of world's climate, *where Man's free will had to be under control since the start of the mankind, as being eventually*

[30]Sector of the World Shipping, which carries un-scheduled cargoes, unlike "Liner Shipping" and Containers. Its ships are the "cargo taxis of the oceans". Tramp shipping does not need a plethora of port agents, or 2 ships per route at least, or higher ship speeds, own loading/unloading means, heavy advertising, a long life in business and a good organization. British were the first to advance Liner shipping to serve their numerous world colonies lacking port facilities. They established the first maritime cartel between India and UK in 1875.

[31]"Lloyd's list": 28/05/2025.

harmful…

Predictability was what the old theory promised. Of course predictability, especially in business, is a crucial issue, because it could lead to a success, if it is perfect. Businesses look after perfect predictability, like humans, who look for immortality or longer life.

Greek shipowners had/have 6, traditional, strong, red lines concerning their growth: a) they fear to order newbuildings, unless they have 100% of the cash required; b) they avoid to prepare their wives for their … unexpected death; c) they are not prepared to face the frequent split ups in their companies; d) they found it difficult to survive from their multiple depressions; e) they did not protect their company from the variations in the foreign exchange parities[32] and f) they were/are afraid[33]—by great majority—to be *listed.*

Greek shipowners achieved their faster growth in a rather safe way: *by adopting well-planned economies of scale; by applying economies of low age* (2nd *hand ships of* 5/10 years *of age*); *by ordering/buying ships always at rock-bottom prices; by applying perfect timing when taking a decision; and by employing or becoming a financial engineer…in their* 2nd *generation.*

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

Battram, A. (1998). *Navigating Complexity: The Essential Guide to Complexity Theory in Business and Management.* The Industrial Society.

Besanko, D., Dranove, D., Shanley, M., & Schaefer, S. (2017). *Economics of Strategy* (7th ed.). Wiley.

Boisot, M. (1995). *Information Space: A Framework for Learning in Organizations, Institutions and Culture.* Routledge.

Collins, J. C. (2001). *Good to Great.* Harper Business.

Couper, A. D. (1999). *Voyages of Abuse: Seafarers, Human Rights & International Shipping.* Pluto Press.

Fayol, H. (1916). *Industrial and General Administration.* Danod.

Gladwell, M. (2006). *The Tipping Point: How Little Things Make a Big Difference.* Little Brown.

Goulielmos, A. M. (2002). Complexity Theory Applied to Management of Shipping Companies. *Maritime Policy & Management, 29,* 375-391. https://doi.org/10.1080/03088830210144305

Goulielmos, A. M. (2017). The Great Achievement of the Greek-Owned SHIPPING (1946-2017) and Keynes' Animal Spirits. *Modern Economy, 8,* 10. https://doi.org/10.4236/me.2017.810082

[32]Assume that a Greek shipowner ordered a vessel in Japan at a price of 14,000 m Yen (to be paid-out in future installments). This means USA $100 m at the parity of 140 Yen to 1$. Assume then that the parity changed to 93.33 Yen to 1$, meaning $150 m to pay now …

[33]Goulielmos (2021).

Goulielmos, A. M. (2018a). Self-Reinforcing Mechanisms in Economics: With Two Case-Studies from Shipping Industry. *Modern Economy, 9,* 1313-1337. https://doi.org/10.4236/me.2018.97085

Goulielmos, A. M. (2018b). Time and Equilibrium: 2 Important, but Invisible, Concepts of Economics, with Application to Shipping Industry. *Modern Economy, 9,* 536-561. https://doi.org/10.4236/me.2018.93035

Goulielmos, A. M. (2020). An Anatomy of Cycles in Shipping Industry, 1946-2020. *Modern Economy, 11,* 1671-1695. https://doi.org/10.4236/me.2020.1110116

Goulielmos, A. M. (2021a). Managing Shipping Companies, the Way Their Pioneers Did: The Case-Studies of Aristotelis S. Onassis II and Angeliki Frangou. *Modern Economy, 12,* 247-273. https://doi.org/10.4236/me.2021.121013

Goulielmos, A. M. (2021b). Is Shipping Industry Ready for the New Fuel? *Modern Economy, 12,* 1999-2022.

Goulielmos, A. M. (2021c). Managing Shipping Companies, the Way Their Pioneer Managers Did: The Case-Study of Stavros Niarchos, 1909-1996. *Modern Economy, 12,* 878-902. https://doi.org/10.4236/me.2021.124044

Goulielmos, A. M. (2021d). Managing Shipping Companies, the Way Their Pioneers Did: The Case-Studies of Vafias N. Family and Aristotelis S. Onassis. *Modern Economy, 11,* 2156-2182. https://doi.org/10.4236/me.2020.1112142

Goulielmos, A. M. (2021e). To Be or Not to Be Listed? A Dilemma of the Greek-Owned Cyclical Shipping Companies. *Modern Economy, 12,* 401-428. https://doi.org/10.4236/me.2021.122021

Goulielmos, A. M. (2022). How a Company Could Benefit from the Volatility of Prices: The Shipping Industry as a Case Study. *Modern Economy, 13,* 977-1005. https://doi.org/10.4236/me.2022.137052

Harlaftis, G., & Theotokas, J. (2007) *Greek Ship Managers and Shipping Companies: Organization, Control and Strategy* (Alexandria editions).

Keynes, J. M. (1936). *The General Theory of Employment Interest and Money.* Macmillan & Co Ltd.

Lorange, P. (2009). *Shipping Strategy: Innovating for Success.* Cambridge University Press.

Morgan, G. (1986). *Images of Organization.* Sage.

Peters, T. J., & Waterman, R. H. (1982). *In Search of Excellence.* Harper & Row.

Priesmeyer, H. R. (1992). *Organizations and Chaos: Defining the Methods of Nonlinear Management.* Quorum Books.

Robbins, S. P., & Coulter, M. (2018). *With Contributors, Management* (14th ed., Global ed.). Pearson.

Simon, H. A. (1955). A Behavioral Model of Rational Choice. *The Quarterly Journal of Economics, 69,* 99-118. https://doi.org/10.2307/1884852

Smale, S. (1967). Differentiable Dynamical Systems. *Bulletin of the American Mathematical Society, 73,* 747-817. https://doi.org/10.1090/s0002-9904-1967-11798-1

Smith, A. (1776). *The Wealth of Nations* (Introduction by D D Raphael). Everyman's Library.

Stacey, R. (1996). *Complexity and Creativity in Organizations.* Berrett-Koehler.

Stokes, P. (1997). *Ship Finance: Credit Expansion and the Boom-Bust Cycle* (2nd ed.) LLP.

Stopford, M. (2009). *Maritime Economics* (3rd ed.). Routledge.

Taylor, F. W. (1911). *Principles of Scientific Management.* Harper.

Watts, D. (2011). *Everything Is Obvious.* Crown Business.

Wheatley, M. (1994). *Leadership and the New Science.* Berrett-Koehler.

Wiersema, F. (2001). *The New Market Leaders.* Free Press.