

Regularity analysis and development research of ship market

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Abstract. International shipping market as the relevant market, shipbuilding market (shipbuilding market, the second-hand boat market, scrapping market) in similarly profound impact on adjustment of shipping enterprises investment and management decisions, therefore, the study of variation is critical to shipping companies in the shipping market. Of the ship make a qualitative analysis of the market based on the empirical analysis of econometric methods, shipping market focuses on quantitative analysis to the regularity of the dry bulk market, analysis of profit maximization and equation formula of marginal analysis and elastic analysis, concluded a group reflects the shipping market and shipping market indicators of an econometric model.

Introduction

Since the 20th century, with the accelerated world economic development and global integration process, shipping companies have faced increasingly fierce competition and complex situation. In the fierce market competition, the enterprises to survive, first of all for myself has been entering or about to enter the market have a correct judgment. On market maturity, life cycles, market capacity, development, rules, competitors must have a correct judgment, will ride safely in the fishing boat, there may be a variety of market risks is in your control, because neither market panic or disarray because of the intense competition. But in order to do this, the most basic is to come from research and market rules.

World shipbuilding market development depends primarily on the rise and fall of the shipping industry, and the rise and fall of the shipping industry and maritime trade has a direct relationship, this is a chain reaction of any change in the relationship between them will have an impact on the development of ship market. And in this interconnected system, General State depends on the situation of world economy. Under the influence of uncertainties in this series, ships show strong volatility of the market.

Many authoritative international maritime Research Institute had been on the ship of demand and market fluctuations had several studies, but the results are less than ideal. Can be seen from historical records from hundreds of years of years, ships of the world were of irregular fluctuations in the market, shipbuilding and shipping industries have had a huge impact in the world. Analysis and forecast of world shipbuilding market fluctuations, of the national shipbuilding industry and the shipping industry is of great strategic significance.

Overview of the world shipbuilding market

Some scholars call shipbuilding market individually ship market, new shipbuilding markets, second-hand ship market and is closely related to the shipping market, isolated study one market may be biased and, therefore, should use systems thinking to study shipbuilding market.

Entry into force and implementation of the new rules, the new specification, also introduced a series of new rules and regulations. June 2006 adopted rules regarding protection of fuel tanks, which not only makes the cost increases, especially effect on large container ships and container ship quantity will also fall sharply. Through the coating standard, dedicated seawater ballast tanks on the ships of concern basically concluded its consideration of the performance standard for protective coatings. The end of November, which will be adopted by the IMO MSC eventually. The standards will be applied to total and seawater ballast tanks of all types over protective and 150 metres and

above carry side compartment for high density cargo bulk carriers premises protection. IMO said the new coating is standard on the bulkhead of the protection period may be up to 15 years, will greatly improve the safety of shipping, and reduces operating cost from the shipowner. However, the implementation of the standards for shipyards, will bring a lot of trouble, first paint during prolonged influence was already very tight construction period, and schedules, the second is the increase in labor costs.

Formation of new shipbuilding market is shipping market sources of supply. As market changes are concerned, the new changes in the shipbuilding market rules were similar to shipping markets. They are all about lifting the world economic situation, subject to market conditions, war, international Canal closed, the impact of incidental factors such as strikes, shipbuilding market volatility. The shipping price shown in Figure 1 shipbuilding market shows a certain degree of volatility can be seen.

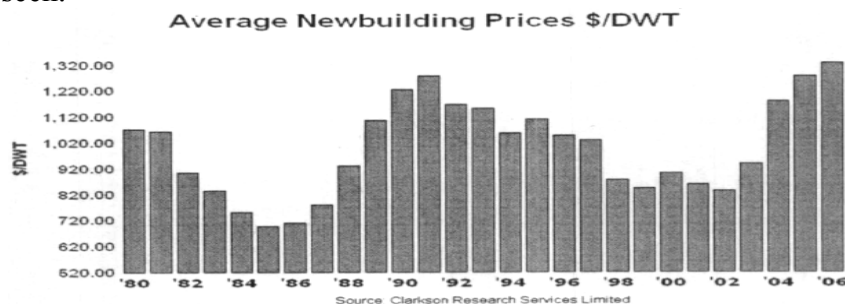


Fig . 1 Average price of new shipbuilding

World economic growth and trade development are the main factors affecting shipping. China's oil, iron ore and other bulk cargo sea transport demand, to a large extent determine the trend of the international shipping market. In addition, there are still many uncertain factors, such as high oil prices, Iran nuclear issue and the problem of uncertainty and continued appreciation of the Renminbi against the us. For the moment, complicated shipping market, favorable and unfavorable factors, also affect the shipbuilding market.

Ship dismantling is also shipping market bellwether shipping market as possible, the owner would be put off the dismantling of old ships of their time, reductions in dismantling dismantling ships significant increases in prices, dismantling the ship also increases.

Economic development and prosperity of shipping is shipping demand factors in the market, and world shipbuilding capacity is supply factors in the shipping market. Today's Korea's shipbuilding capacity, the new ship orders with Japan to keep pace, and years, to undertake a new shipbuilding contracts more than Japan, became the first shipbuilding countries. Korea by expanding production scale and production efficiency to expand production capacity, Japan by shipyards merged to improve production capacity. Followed by China, in third place, but with the rapid development of China's economy and overall national strength, the clarion call has sounded to the shipbuilding powers, developed a "world first" goal, three shipbuilding bases Shanghai, Huangpu, Bohai Bay after the upgrade is complete, world shipbuilding patterns change once again.

World economic situation and currency situation. Exchange rates changes in interest rates, the financial industry to shipping and shipbuilding industry and the confidence to lend, have a large impact on the shipbuilding market. Set currency to national currency appreciation, would have a beneficial effect on shipbuilding exporting region instead, currency depreciation, bad for the exporters, but changes in international exchange rates can only affect the interests of shipyards and shipowners concerned, rather than on the ship have a long-term impact on the market as a whole. Changes in exchange rates, bank interest rate shown in the final float price, from a macro perspective, changes in exchange rates and financial markets will bring about changes in share of new ship orders, also pose risks to the shipping community and the short-term effect, but not enough to affect the entire market for a long time.

In accordance with the dialectical materialist point of view, everything in the world has its own law of development and change. Changes in the shipping market was no exception, ship market volatility does not mean that there is no change, but it was not more fully grasp them.

Changes in the world shipbuilding market has its own characteristics, which is non-rational, non-linear and non-repetitive.

Regularity analysis of shipping market

Econometrics is the economic relationship is one of empirical economics branches. "Measure" represents a measure of Econometrics is mainly measured economic relationship. Use of economic theory, econometrics and statistical theory, measure the relationships between economic variables and testing experience, so join the contents of experience in economic reasoning. Economic theory in economic models by summaries of the data to reflect the fact that the statistics reflected on econometric methods.

Econometric models mainly has following several aspects the purpose of

- Structural analysis, analysis of changes in economic variables or the parameters influence on the economic system as a whole.
- Economic forecast, due to econometric forecasting based on predicted to cause the change of forecasts and forecast models can also take into account multiple causal relationships between economic variables, econometric models with higher accuracy.
- Policy evaluation, using an econometric model of quantitative changes in policy variables influence on the economic system that is in fact a condition forecast is on the implementation of various policies of "simulation".
- Empirical analysis, using an econometric model and empirical analysis of the actual statistics to a theoretical hypothesis is correct or not.

Shipping market is controlled by the source, you need to provide the supply of maritime transport, and to provide the necessary capacity (vessel), composed for the owner to realize the supply of maritime transport. Our shipping analysis of factors affecting the supply and demand sides of the market.

World seaborne trade on market demand is obvious, such as the Asian financial crisis on the world maritime transport market has a huge impact, freight rate, as the freight rate increases, the owner will choose other modes of transport as an alternative to maritime transport, travel to source, so that reduced demand for maritime transport. In practice, due to changes in freight rate always keep within reasonable limits, so changes in freight rates for shipping demand is not very clear.

Main factors affecting most of the world fleet is new shipbuilding and ship number, meanwhile, can best embody the new shipbuilding market, national policies and other aspects of the economic impact and, therefore, for market analysis, important new shipbuilding market is reflected in the analysis.

New shipbuilding market is by supply side (shipyards) and the demand side (the owner), and shipowners in the shipping market and plays a dual role in the market.

Generally speaking, in the shipping market is better, when ship prices rising, the enthusiasm of the owner to buy a boat is still very high, shipbuilding factories through various means to increase shipbuilding capacity. The other hand, the rate of ship dismantling and shipping market conditions closely related to when in the shipping market, the owner will be to repair the ship and other means to try to extend the life of old ships, so that the shipping fee reduction.

Application of Ship market model

Through the establishment of a group of econometric model equations, the freight rate, shipping idle costs, new and second hand vessels price as well as the combined fleet to verify the correctness of the model.

In the model, our human factors are described, namely decision makers on the market have rational expectations. Rational expected contains effective of market assumed of meaning, because this way on information of processing is optimal of and is effective of. 1) period rent rates assumed can reflect on drive rent rates future value of rational forecast. 2) new ship of set made price can

reflect with type of ship in handover ship Shi of general forecast price. 3) for second-hand ship of needs, in other situation phase while, main depends on on second-hand ship price of forecast.

We can reasonably assume that owners to maximize profits in a fully competitive conditions for behavior targets at the same time, they are the recipients of market spot Charter rates, is also accepted by the unit cost of voyage, voyage costs largely by fuel costs and port charges and crew wages constitute these cost factors in the model is assumed to be exogenous. Within a certain time limit, any ship involved in the voyage number assigned to it by the owner instead of the ship's average speed is proportional to. In other words, the average speed of greater and more while at the same time its voyage, ship speed is closely related to the voyage costs, faster speed, higher cost, therefore they will not speed the faster the better, and have a question best speed.

Analysis of the shipbuilding market should be divided into two parts, the part is built of new ships. Another part is a new delivery of the ship. The two are not the same, because the new building ship prices with the same type of delivery between the shipping price difference or big or small. The reason is simple, new delivered ships can go on operations, while the new ships would have to wait until construction is completed before entering operation.

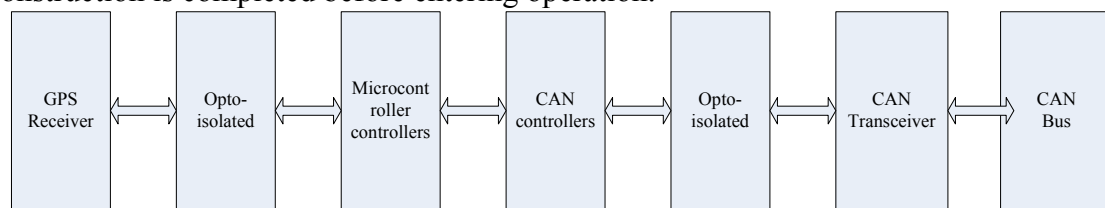


Fig . 2 Ship market analysis of the economic structure

We first look custom-made dry-bulk ships, we have custom-made analyses should reflect current market prices, and under the influence of its prices and construction costs. And since the same period they built the tankers more profitable if owners likely to tend to build oil tankers and dry bulk carriers. Custom-made price so the tanker could have a negative impact.

How to accurately determine the shipping market peaks and troughs, and take measures to build new ships or to sell the ship, a shipping enterprise is critical and very difficult things. By weighing the pros and cons, some foreign shipping companies often adopt a policy to fund, that is in the shipping market and price rises, sold at a favourable price of a poor economic performance of old ships that at times of market downturn, you made a number of good economic performance at a preferential price of new ships.

In recent years, the shipbuilding market has been a seller's market, because of excess shipbuilding capacity, and owners in a new ship built in a good position on the trade ship prices tend to be lower. However, shipowners also faced a boat goods less, low freight cargo market. Owners of low-income, seriously affecting their investment pay off, ship as the asset value of the vehicle, to a very low level, at this time, price levels subject to the rate levels.

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