Evaluation of Annually Report of Chamber of Shipping of Turkey With Respect to Forecasting Techniques

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ABSTRACT
In this study, Chamber of shipping annually reports has been examined that how much forecasting techniques were used in and whether shipping companies/intuitions practice them during the investment process and company internal decisions. Literature on forecasting techniques were reviewed. Turkish Chamber of Shipping Reports (CSR) 2013 has evaluated in terms of using the techniques. It was seen that only “average method” is used in the reports. After gathering this result four big shipping companies’ (Maersk, Msc, Uasc, Cma-cgm) manager, who are somehow or directly responsible for companies forecasting and market research issues, were interviewed. The interviews were held by managers created some questions that should be asked to Chamber of Shipping in Istanbul. As a last step, we held an interview with Capt. Ahmet Tagmaç in Istanbul, who is coordinator of the report team and additionally prepared the economical evaluation chapter for the CSR and were talked about report preparation process, aims of reports, resource determination criterias and expectation of the shipping sector from the CSR. The last step of the study is to compare Turkish Chamber of Shipping report with another shipping report which was prepared in 2012 by DNV (Det Norske Veritas) which has a projection of shipping sector to 2020. We came a conclusion that when CSR was examined in respect of data quality, reliability and quantity the reports so much enough. It also has been confirmed during the interview with managers. Interviewees also highlighted the capability of the reports. However, when forecasting and market research techniques is considered, the reports are not enough. The lack of methods is interpreted by the Capt. Tagmaç that Chamber’s aim is not to make forecasts or research of any kind but to inform the sector.

Deniz Ticaret Odası Yıllık Sektör Raporlarının Tahminleme Yöntemleri Açısından İncelenmesi

Anahtar Sözcükler:
Öz

Cite this article as
1. Introduction

Some researchers say that forecasting simply refers to a ‘process’ of predicting the future (Polat, 2007). However according to Martin Stopford these kinds of explanations can cause a misunderstanding about the main idea of forecasting. He argues that forecasting aim is not predicting future and he depicts much more realistic. “Since forecasters only called on to predicting things, their task is not to predicting precisely, it is to help decision makers to reduce uncertainty by obtaining and analysing the right information about the present and show how that information can help to understand the future.” That is why forecasting can be wrong like most of time we are wrong in our daily lives (Stopford, 2009:742).

Peter Drucker, Planning Director at Shell UK, says if anyone suffers from the delusion that a human being is able to forecast beyond a very short time span look at the headlines in yesterday papers and ask them, which of them anyone could have possibly predicting a decade or so ago (Drucker, 1997). As Peter Ducker says, even if we know that forecasting does not manage to give exact information about future and what will happen still forecasting can give us an idea of the direction or possibility of events.

Our society use forecast nearly in all fields: economy, business, insurance, finance, physiology, sociology, physic, weather, football, games, anthropology, agriculture, pollution issue, traffic control, architecture, astronomy. Virtually any firm, regardless of its size or the nature of its operations (profit or non-profit, private or public), has to develop some type of forecast. Their success flows from an ability to combine intuition and general knowhow with solid information and turn it to successful forecasting and analysing (Kress, 1994).

Forecasts are important inputs of investment management as well and are necessarily included in shipping business decisions. Forecasting aids decision-making in the shipping business and shipping investment management. For managers, analysts, and other practitioners in the shipping industry, the decision is “the raison d’être” and is based on forecasts even if forecasts are inferior (Duru, et al., 2009).

Nearly whole science and arts uses forecasting methods. In Shipping, forecasting is also used by banks, governments, port authorities, shippers and other organizations with an interest in their business. If we take maritime economy under considerations, forecasting is used for spot chartering, time chartering, sale and purchase decision, budgeting, strategic and corporate planning, product development, government policy making, and bank credit analysis. (Stopford, 2009: 708)

All of the foregoing suggests that forecasting is not about the future, it is about obtaining and analysing the right information about the present. The right information is not always easy to come by, but it is important. Few investors would be rash enough to buy some ship without the information provided by physical inspection, and exactly the same is true for decisions which depends on economic development. (Thomas, 1997).

First of all information should gain adequate level. Lack of information or wrong information directs decision maker to the wrong solutions. The freight rates from the past reduces uncertainty and can help decision maker to find their way through the
jungle, so careful researches are important. Although it seems obvious, it is surprising how often decisions are taken without researching key variables (Stopford, 2009: 702).

2. Forecasting Techniques

Any micro forecasting technique will generally fall into one of three broad categories of models: time series, causal or judgemental. It is summarized in Figure 1.

![Forecasting Models and Techniques](image)

**Figure 1. Forecasting Models and techniques (Markidakis, 1998)**

Forecasters should choose appropriate model according to their business. After gathering enough information, proper forecasting model amongst the qualitative and qualification methods should be chosen in terms of time span (short term, long term or intermediate term). Budget (how much money you can spend for forecasting), data availability (have you got data or do you have to collect?) and ease of application and understanding are also important. (Malhotra, 2004).

2.1. Time Series Models

Time series data refers to observation on a variable that occur in a time sequences. Mostly these observations are collected at equally spaced, discreet time intervals. When there is only one variable upon which observation are made then we call them single time series or more specifically a univariate time series. (Bhar, L.M. at all, (1998) All-time series method are based on this principle.

2.2. Causal Models

Causal forecasting methods are based on the relationship between the variable to be forecasted and an independent variable. The causal methods search for reasons for demand, and are preferred when a set of variables affecting the situation are available (Armstrong, J. S. 2012). Both kinds of models (time series models and the linear causal methods) are easy to develop and implement (Benkachcha, 2013)

2.3. Judgemental Models

Judgemental forecasting models incorporates intuitive judgements, opinions and probabilities. These models are valuable forecasting techniques in their own right and
are especially valuable for long range forecasting and developing forecasts for new and unique models covered sales force composite, buyers survey, jury of expert, Delphi method, scenario building, technological forecast, analogs, cross impact and simulation. (Kress, 1994)

2.4. Other Quantitative Methods

Most important and widely use other quantitative techniques are market research and operation management techniques. These are costly and more detail techniques. In marketing research, for example; interviewing, survey or observation are used as tools. It is basically starts with determination problem, go on with sampling, questionnaire design, data collection and analysis.

Operation research contains mathematical techniques. It basically focus on solving particular problem. When operation research is used to solve a problem of an organization, the following seven steps procedure should be followed; formulate the problem, observe the system, formulate a mathematical model of the problem, verify the model and use the model for prediction, select a suitable alternative, present the results and conclusions of the study, implement and evaluate recommendation (Topçu, Y. I. at all, 2014)

3. Objectives

The objectives of this study are finding the forecasting techniques used in the reports; analysing the efficiency and proficiency of these techniques; finding out the sectors ideas, recommendations and complaints about the reports in terms of data availability, trust, the techniques used and finally figuring out the process of preparation.

4. Methodology

Questionnaire was not found suitable for this paper. In order to direct to interviewee, right path semi-structured interview questions were prepared. In this way, the answers of interviews are more specified. The main job is to get interviewee to talk freely and openly while making sure you get the in depth information on what you are researching.

Methodology of the study is semi structured interview with middle manager of big line shipping company like MSC, Maersk, UASC, and CMA-CGM who are using the shipping reports during their work life and with responsible people who prepare the reports Turkish Chamber of Shipping in Istanbul. By the way, the method used in this paper is best explained as market research method in the Figure 1.


Semi-structured interview questions were asked about the usage rate of reports, trust and availability of data is given in the report, objectives of companies for using the reports, forecasting and market research techniques usage rate, ideas of managers about quality of data, process of the preparation of data. MSC, MAERSK, UASC, CMA-CGM and TURKISH CHAMBER OF SHIPPING OF ISTANBUL were chosen as the samples of this study because all these line companies are the main companies
and use the reports mostly. Turkish Chamber of Shipping of Istanbul is also chosen because of desire of learning how the reports preparation process works. It was aimed to reach core of the case by interviewing with people who actually prepare the reports.

Data collected with semi-structured interview. The interview was held with Seçil SEYRANİ Customer Service & Booking Desk (Export) in CMG-CMA on 18.03.2015, Ayça GÜKTEPE Corporate Com. & Man. Support Manager in MSC on 01.4.2015, Metin Sami EVREN corporate communication manager in MAERSK on 20.03.2015 and İbrahim TOKTAS 03.04.2015 account manager in UASC. Additionally, special interview with Capt. Ahmet TAGMAC on 07.04.2015, who is coordinator of the reports and head of the trade department, was held.

5. Evaluation and Comparison

In the beginning of study we have evaluated the reports with literature reviews. After reviewing Chamber of shipping report was compared with another shipping report which has been prepared by a consultant company (Det Norske Veritas (DNV) for 2020. The results of these reviews and crosschecks showed us the way and issue that has to be considered during the interview with chamber of shipping and line companies managers.

5.1. Forecasting and Market Research Methods Used in the Chamber of Shipping Sector Report

After studying on the CSR in 2013, not so much forecasting techniques found are used in the reports. Only average method (The Average Age of Dry Cargo Segment DWT%, Average Age of Bulk Carriers DWT%, Average Age of Oil Tankers DWT%, Average Age of Chemical Tankers DWT%, Average Age of Container ships DWT%, Average Age of Ro-Ro Ships DWT%...) is used. Table 1 is one of the example for Average method in CSR.

<table>
<thead>
<tr>
<th>Ship Types</th>
<th>Num.</th>
<th>Tonnage (DWT)</th>
<th>Tonnage (GRT)</th>
<th>Ave. Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Cargo</td>
<td>244</td>
<td>1.296.561</td>
<td>846.951</td>
<td>24</td>
</tr>
<tr>
<td>Bulk Carriers</td>
<td>94</td>
<td>4.352.415</td>
<td>2.452.503</td>
<td>13</td>
</tr>
<tr>
<td>Containers</td>
<td>52</td>
<td>790.366</td>
<td>628.846</td>
<td>11</td>
</tr>
<tr>
<td>Dry Cargo/Containers</td>
<td>19</td>
<td>135.020</td>
<td>95.140</td>
<td>11</td>
</tr>
</tbody>
</table>

It was seen that chamber of shipping reports gives the data perfectly however there is no analyse or forecast side. There is no smoothing, regression or correlation methods in the reports. Only information is given and simple average methods is used.

After establishing this deficiency questions were prepared to ask interviewees and to find out whether this reports meet the sector needs. According to literature findings, semi structured questions were asked both to the user of report (shipping companies) and report design team.

Finally, interview was held with companies, complaints and recommendations were delivered in the interview was done with Ahmet TAGMAC, who is coordinator of
Chamber of Shipping Report team. By this way, the question which had come to mind during the literature review were answered both by sector and reports preparators. Additionally, objectives of project were reached by these cross interviews.

5.2. Questions were Asked to Manager and Their Answers

Totally 12 questions, which can be found in Appendix 1 in detail, were asked to the managers of shipping companies. The questions mainly aimed to find that how often companies use CSR, their aim to use CSR, whether they have any complaint about CSR, whether they have any advice to people who prepares the reports and what they expect from CSR.

The answers were evaluated and the results are as follow:

- Companies agree that the shipping reports are meeting the objectives when shipping sector data serving is an issue.
- All companies were interviewed use reports for seeing sector situation
- MSC, MAERSK use only parts that related with its business. CMA also examine it as a whole.
- All manager say that they don’t use the CSR during an investment process or for company’s internal decisions
- All managers agree that reports are trustworthy and objective
- Companies agreed that reports are enough to understand market but not enough to forecast future.
- All managers agree that CSR does not use enough forecasting techniques.
- Only MAERSK has separate budget for market research.
- Only MAERSK has a team particularly work on forecasting and market research. In other companies statistic or marketing department is done forecasting and market research additionally.
- Maersk want to know that how is CSR funded. Others do not.
- CMA want to be informed about people who are preparing the reports. Others do not
- Metin Sami Evren from MAERSK “we could not see the actual full and empty container rate according to container types and ports in the reports so we could not analyse efficiently container goods market. Besides, the goods are carried should be examined according to the last destination, in this way we would have an idea about trade root. Last but not least reports have to contain forecasting approach not only data”. On the other hand, Seçil Seyrani from CMA says “I prefer reports that contains a projections of the future which the reports do not have. In these reports, the effects of global economies and shipping market fluctuations on our region should be examined”
5.3. **Question were Asked to Capt Ahmet Tagmaç in Chamber of Shipping in Istanbul**

The interview was held with Mr. Tagmaç in İstanbul. The aims of the semi-structured question were that to learn the reasons of forecasting techniques deficiency in the CSR; to get information about process of preparation of the CSR; to reach the information about report design team and especially their professionals; to figure out resource determination process; to deliver the sector complaints and advice to Chamber of Shipping, and to get the Chamber of Shipping comments about these complaints and advisees.

The answers of the questions that asked to Chamber of Shipping can be summarized as follow.

Capt. Ahmet Tagmaç has working for preparation of the reports for 10 years. He is coordinator of the CSR. He has master degree in economy and also prepares the economic evaluation for the CSR. There are 10 people in the reports design team and their professionals are maritime transportation engineering, economy and international relation. The reports preparation lasts nearly 4 months and they try to finish until end of July.

Resources that are used in report is an important issue as well. Mr. Tagmaç stated that reliability and internationality of resource is considered first. That is why they use International Maritime Organization (IMO), International Chamber of Shipping (ICS) and Clarkeckson data as an international source. Regionally, they choose most official sources like TUIK (Turkey Statistical Agency) and UHDB (Ministry of Transportation, Communication and Maritime) sources. Additionally, they get the information about fleet from the registration to regional chamber of shipping’s branch.

The forecasting and statistical technique deficiency was asked to the Mr. Tagmaç and he answered that aim of report is to inform their members and give the reliable and qualified data to them and they actualized these aims truly. If companies want to do forecast the data are given in their reports are definitely enough.

5.4. **Comparing the Turkish Chamber of Shipping Sector Report with the Another Report.**

After literature reviews and interviews, the last step is comparing the Chamber of Shipping reports with a shipping report was prepared by a private consulting company. This was found necessary in order to show how a suitable, quality, useful and forecast included report should be.

The main difference between Turkish Chamber of Shipping reports and other consultant shipping sector reports, which are done by consultant companies, is that while consultant companies are using data in order to project future, Chamber of Shipping prefers just serving data but rather making any forecasting. For instance, Figure 2 was taken from DNV 2020 shipping sector reports in 2012 and it shows the commodities in seaborne trade and what it will be in the future according to the trend. As the same, Table 2 was taken from CSR in 2013 and it also shows the commodities however there is no projection.
Figure 2. Seaborne trade by commodity (forecast included)
Source: IHS Global Insight and SAI data as of February 2012.

Table 2. Cargo type that was carried according to mode (Turkish Chamber of Shipping Report, 2013)

<table>
<thead>
<tr>
<th>Cargo type</th>
<th>Cabotage Load</th>
<th>Cabotage Unload</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Cargo</td>
<td>8.396.198</td>
<td>9.925.278</td>
<td>18.321.476</td>
</tr>
<tr>
<td>General Cargo</td>
<td>5.169.253</td>
<td>5.182.563</td>
<td>10.351.816</td>
</tr>
<tr>
<td>Liquid Bulk</td>
<td>9.872.957</td>
<td>9.653.761</td>
<td>19.526.718</td>
</tr>
<tr>
<td>Container</td>
<td>2.634.739</td>
<td>3.097.609</td>
<td>5.732.348</td>
</tr>
<tr>
<td>Vehicle</td>
<td>3.195</td>
<td>2.385</td>
<td>5.580</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26.076.342</strong></td>
<td><strong>27.861.596</strong></td>
<td><strong>53.937.938</strong></td>
</tr>
</tbody>
</table>

CSR also is not enough to show the relationship with components. As we explain in the paper time series and causal model forecasting are the way to examine relation between data. The DNV 2020 reports for example does not only give tanker fleet but also shows the effect on crude seaborne trade and relation between them (Figure 3). Of course again forecast is included. However, when we look at the CSR tanker fleet section only fleet number and size is given. (Table 3)

Table 3. Oil tanker by tonnage and Age Groups (DWT)

<table>
<thead>
<tr>
<th>DIVISIONS OF TONNAGE</th>
<th>Oil Tankers by Tonnage and Age Groups (DWT) (1000 GRT and Over)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 - 9 Years</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>150 - 1499</td>
<td>0</td>
</tr>
<tr>
<td>1500 - 5999</td>
<td>1</td>
</tr>
<tr>
<td>6000 - 19999</td>
<td>3</td>
</tr>
<tr>
<td>20000 - 49999 (Product Tanker)</td>
<td>0</td>
</tr>
<tr>
<td>50000 - 79999 (Panamax)</td>
<td>0</td>
</tr>
<tr>
<td>80000 - 109999 (Aframax)</td>
<td>0</td>
</tr>
<tr>
<td>110000 - 164999 (Suezmax)</td>
<td>6</td>
</tr>
<tr>
<td>165000 - 299999 (VLCC)</td>
<td>0</td>
</tr>
<tr>
<td>300000 + (ULCC)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10</td>
</tr>
</tbody>
</table>
The shipping reports are prepared by Chamber of Shipping also gives an overview about global economy, trade and economic index in detail however this information is not connected with seaborne trade. Figure 4 and 5 were taken DNV reports and they give world economic indicator with the effect and relationship.

Chamber of Shipping use really prestigious report. Even they use nearly same resources with DNV. However, DNV uses this data to make a projection and show the relation between economical indicates and trade. In the other hand, Chamber of Shipping just serve, collect and organize the data.
After these comparisons it can be said that shipping reports have to be improved in terms of forecasting usage rate. Because in this way they can be more efficient for its users and increase their prestige amongst its users.

6. Conclusion

Desire of figuring out what will happen tomorrow has been big matter for humanity. However, for companies it is vital. Of course secretly we know that we have not got enough technology to figure out exact future. However, companies somehow have to know the trend or guess the big picture even if it is flue.

Because of big investment -and investment always related the future- shipping companies are more worried about future. The volatility of sector, big loses and big profits makes the shipping both risky and attractive. Once a company get in the shipping sector it has to fight uncertainty, risk and volatility. So the biggest gun of them is forecasting. Because forecasting directly affects their success. For instance, we know that, from the interviews were made for this project, only MAERSK have a team for forecasting and market research and Maersk is the leader of the shipping world in most of field. That means the market domination power is not a coincidence. In order to project future well, the most important thing is to have reliable and enough information about past. The more information about past is qualified the more forecasting fitted to reality.

Turkey Chamber of Shipping is one of the important authority that provide shipping market information to us. Their annual report tell us a lot about fleet, commodities, transportation, maritime tourism, maritime economy and even maritime education. They use highly prestigious source like Clarckson, Platou reports and International Chamber of Shipping reports. So companies and academicians can use this information in order to make forecast. However, shipping reports have big deficiency about using mathematical application; forecasting methodologies; showing relationship with component, economic indicators and seaborne trade. All managers, who interviewed with, add these deficiencies as a comment as well.

The Chamber of Shipping reports coordinator in Istanbul was asked that why they do not prefer using forecasting methods in reports he stated that because, it is not the
aims of the reports. He added that their job is not make forecast but inform the sector.

It is true that sector reports are not prepared for helping investment decision of the shipping companies however it would be very prestigious if their reports has enough mathematical calculations, clever forecasts and different scenarios. Of course a valuable market research cannot be prepared without any market forecast like CSRs. In any market report, the aim is not to define the market forecasts. These forecasts are inputs to market researches.

According to interviews were held with Chamber of Shipping, it was seen that they have not got budget problems and they easily improved the reports. It is not necessary to change whole structure. They can add a chapter with full of brilliant forecasting application. It is not too hard, because their knowledge, capability and experiences are enough for this process.

As a conclusion, the objectives of projects are reached. The most important forecasting and marketing research techniques are explained in literature review. Analysed whether these techniques are used in the CSR. Reached the market idea about reports by holding interview with manager of big companies and tried to find the reason of the complaint and figured out the process of preparation of the reports by holding interview with Ahmet TAGMAC who coordinator of chamber of shipping reports.

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Appendix

Appendix 1.

1) Do you think Chamber of Shipping Reports (CSR) is manage to meet its objectives?
2) In which purpose do you examine and use CSR?
3) Do you examine CSR wholly or only the parts are related with your business?
4) Does your company apply the CSR during an investment process or for company’s internal decisions?
5) Do you find CSR trustworthy and objective?
6) Do you think CSR is enough to understand shipping market and to forecasting to future of market?
7) Do you think forecasting and market analysis techniques are using enough in CSR?
8) Does your company separate a budget for market research and forecasting?
9) Is there anyone or team in your company who are particularly appointed for market research or forecasting?
10) Do you know or want to know that how the CSR is funded?
11) Do you want to inform more about people prepare there CSR?
12) Do you have any complaint about or recommendation for the CSR?

Appendix 2.

1) How long do you work in Chamber of Shipping (CS)?
2) What is the purpose of the reports you prepare?
3) How many people work for preparing the reports? Is there a team for it?
4) What are the professionals of others?
5) How long it takes to prepare the report?
6) Is not there anyone from maritime administration?
7) How the reports funded?
8) Which is so important for you in terms of choosing source for the rep; reliability, cost or internationality?
9) Do you make any addition, subtraction, correction according to feedbacks about reports?
10) Do you think CSR are enough to cover the market data need about sector?
11) Does CS do market research or forecasting?
12) How does CS reach the data that is sourced as from Chamber of Shipping in the report?
13) Is there any IT technology you use for collecting and analysing data?
14) Why there is no special parts for tramp shipping and market in reports?
15) Why there is no part about financial market and exchange shipping market in the reports?
16) You have “shipping problem and solutions” chapters in reports. How do you determine the problems?
17) How do you find right solutions? Do you use market research methodology like Delphi to find solutions?
18) Companies say that the reports are enough in terms of data quality about sector however don’t help in terms of forecast the future of market. What do you think?