FORECASTING USE IN UNDERDEVELOPED COUNTRIES

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ABSTRACT
The usage of forecasting in underdeveloped countries as a management tool is quite different than in developed countries. There is a link between forecasting usage and the phases of economic development that these countries pass through different phases should be taken into consideration in order to help the allocation of resources more accurately. Underdeveloped countries have complex economic structure. The complexity of structure should be captured by combined use of forecasting tools such as casual models, judgmental models, and time series.

Forecasting is a very important activity both at the personal and organization level. Forecasting can be obtained by:

1. purely judgmental approaches
2. causal or explanatory models
3. extrapolative models
4. any combination of the above

These fall into two major categories quantitative and qualitative models table 1-1 summaries this categorization scheme and provides examples of situations.
TABLE 1-1 CATEGORIES OF FORECASTING METHODS AND EXAMPLES OF THEIR APPLICATION

<table>
<thead>
<tr>
<th>Type of information Available</th>
<th>Type of forecasting Situation</th>
<th>Sufficient Quantitative Information is Available</th>
<th>Little or No Quantitative Information is Available, But Sufficient Qualitative Knowledge Exists</th>
<th>Little or No Information is Available</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Forecasting changes- or when changes will occur-in existing patterns or relationships</td>
<td>Predicting the continuation of growth in sales or gross national product</td>
<td>Understanding how the effects of price controls, or the banning of advertising on TV, will affect sales</td>
<td>Predicting how automobiles will look in 1990</td>
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<td>Predicting the next recession or how serious it will be</td>
<td>Understanding how prices and advertising affect sales</td>
<td>Predicting the speed of transportation around the year 2000</td>
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<td>Predicting the effects of interplanetary travel; colonization of the earth by extraterrestrial beings; the discovery of a new, very cheap form of energy that produces no pollution</td>
<td>Predicting how oil embargos will affect the consumption of oil</td>
<td>Predicting how the effects of price controls, or the banning of advertising on TV, will affect sales</td>
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<td></td>
<td>Having predicted the oil embargo which followed the Arab-Israeli war</td>
<td>Predicting the next recession or how serious it will be</td>
<td>Predicting how the effects of interplanetary travel; colonization of the earth by extraterrestrial beings; the discovery of a new, very cheap form of energy that produces no pollution</td>
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Goodwin’s (2005) review described nine papers published since 1989 with evidence on judgmental adjustment are useful when;

a) Recent events are nor fully reflected in the data (e.g. last-minute price reductions for a product) Thus, adjustments might be made to revise the current level of the variable being forecast.
b) Historical data are limited.
c) Experts possess good domain knowledge about future changes that have not have been included in the model such as, for example, a sales forecast given a recently planned product improvement. Findings to date suggest that minor revisions should be availed, perhaps because they lead to over adjustments.

Empirical studies have led to the conclusion that relatively simple extrapolation methods perform as well as more complex methods. For example, the Box-Jenkins procedure, one of the more complex approaches, has produced no measurable gains in forecast accuracy relative to simplex procedures. (Makridokis et al 1984; Armstrong 1985) although distressing to statisticians, this finding should be welcome to managers.
Causal models are a way of summarizing forecaster’s expectations about what will happen to time series in the future. In the underdeveloped countries, contrary to common assumption for extrapolations, time series are not always subject to consistent forces that point in the same direction.

Rove (2007) presents evidence that in comparisons with traditional meeting, the Delphi technique can improve forecasting and decision making. How does it do that? If conducted properly, Delphi greatly improves the chances of obtaining unbiased estimates and forecasts that take full account of the knowledge and judgment of experts.

The phases that underdeveloped country experience depend upon the structure of entrepreneurship in an economy. The question of wealth of nation has been at the center of economics for more than three decades. We should focus on entrepreneurship and understand the importance of entrepreneur. In the economy at large, entrepreneurs play a significant role in economic development and use forecasting techniques as an integral part of decision-making process. Every entrepreneur has aims of goals, seek to understand environmental factors. The more we use forecasting technique in an economy the less dependency on chance and randomness we have. The more the underdeveloped countries improve economic conditions. The more the utilization of forecasting technique obtains the structure that those countries economic variables are not predictable easily because of. The lack of statistical information in advance. That’s why these countries should use basic forecasting technique. The simple forecasting’s accuracy is better than the more advanced techniques in underdeveloped countries. Because more advance techniques utilize only information available in statistical data. Underdeveloped countries could not provide accurate quantitative information. The lack of accurate quantitative information input-output models should be considered as an alternative technique. If this input-output technique is used as a forecasting technique in underdeveloped countries the allocation of scarce economic resources among economic sectors will be achieved.

Conclusion

As far as statistical information concerning the accuracy of forecasting models there is a link between economic conditions and the usage of forecasting models. In the underdeveloped countries, the utilization of forecasting system as a management tool is not significant. The main reason for this is that price mechanism is not functioning properly. If price mechanism doesn’t function in the way that economic systems requires, the distribution of economic resources in the economy will not be efficient. This inefficiency leads to unpredictable structure that forecasting models captures. The marketing requirements of the underdeveloped countries are very complex and not easily accessible to survey. The statistical data that underdeveloped countries provide is not unreliable or completely lacking trends are offend not observable nor are there many identifiable historical pattern. Moreover the fast growth of this economics requires large extrapolations in forecasting making enquired predictions difficult.

In order to get a remarkable economic growth in a underdeveloped country, a suitable forecasting model should be employed. This forecasting model should be a model that requires qualitative information rather than objective models or the effective combining of judgmental forecasting with quantitative. When we apply a combined of judgment with quantitative forecasting models, a great amount of care should be devoted to the advantages and disadvantages of those models. The underdeveloped countries must calculate the opportunity cost of each forecasting models then they chose one model that gives the least opportunity cost.
BIBLIOGRAPHY:


