Total cost of different sectors of Esteghlal Hotel. (per $)

Table 2.

<table>
<thead>
<tr>
<th></th>
<th>Rooms</th>
<th>Food &amp; Beverage</th>
<th>Telecommunication</th>
<th>Laundry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages &amp; salary</td>
<td>552375</td>
<td>352713</td>
<td>799996</td>
<td>1067627</td>
<td>24541</td>
</tr>
<tr>
<td>Consumed material</td>
<td>44416</td>
<td>145232</td>
<td>4554346</td>
<td>685417</td>
<td>64604</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>257012</td>
<td>704588</td>
<td>63457</td>
<td>208215</td>
<td>2084</td>
</tr>
<tr>
<td>Depreciation</td>
<td>41264</td>
<td>152551</td>
<td>10549</td>
<td>43317</td>
<td>1001</td>
</tr>
<tr>
<td>Total</td>
<td>895068</td>
<td>1355086</td>
<td>1328350</td>
<td>2004578</td>
<td>92230</td>
</tr>
</tbody>
</table>

Source: Financial reports of Esteghlal hotel, 1996, 2000
References:


Productivity indexes

Table 3.

<table>
<thead>
<tr>
<th>Indexes</th>
<th>1996</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Value added productivity</td>
<td>4776</td>
<td>11611</td>
</tr>
<tr>
<td>2 Value added ratio</td>
<td>0.73</td>
<td>0.73</td>
</tr>
<tr>
<td>3 Revenues/number of employee</td>
<td>6560</td>
<td>15789</td>
</tr>
<tr>
<td>4 Capital intensity</td>
<td>1711</td>
<td>5160</td>
</tr>
<tr>
<td>5 Equipments/number of employee</td>
<td>626</td>
<td>2910</td>
</tr>
<tr>
<td>6 Employee ratio (Wages &amp; salaries/Value added)</td>
<td>0.55</td>
<td>0.22</td>
</tr>
<tr>
<td>7 Profit Ratio</td>
<td>0.45</td>
<td>0.77</td>
</tr>
<tr>
<td>8 Wages &amp; salaries/number of employee</td>
<td>2626</td>
<td>2653</td>
</tr>
<tr>
<td>9 Cost/Revenue</td>
<td>0.59</td>
<td>0.93</td>
</tr>
<tr>
<td>10 Administration expenses/Revenue</td>
<td>0.19</td>
<td>0.13</td>
</tr>
<tr>
<td>11 Revenue/Tangible fixed assets</td>
<td>10.48</td>
<td>5.42</td>
</tr>
<tr>
<td>12 Operating profit/Revenue</td>
<td>0.33</td>
<td>0.56</td>
</tr>
<tr>
<td>13 Productivity of equipments</td>
<td>7.62</td>
<td>3.99</td>
</tr>
<tr>
<td>14 Purchase ratio (1-Value added Ratio)</td>
<td>0.27</td>
<td>0.27</td>
</tr>
<tr>
<td>15 Productivity of Capital</td>
<td>2.8</td>
<td>2.24</td>
</tr>
</tbody>
</table>

(Operating Profit / Value added)
Of important need for this industry in recent decade we could name:
- connection to the system of international reservation
- singing of training contracts management
- cooperation and also common investment obviously we should think of young generation and the use of young trained labor.

**Net Revenue (per $) of Esteghlal hotel**

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rooms</td>
<td>1,883,43</td>
<td>6422951</td>
</tr>
<tr>
<td>Food &amp; beverage</td>
<td>1395002</td>
<td>1,888,473</td>
</tr>
<tr>
<td>Telecommunication</td>
<td>126703</td>
<td>377709</td>
</tr>
<tr>
<td>Laundry</td>
<td>30922</td>
<td>45995</td>
</tr>
<tr>
<td>Sport &amp; Recreational center</td>
<td>31848</td>
<td>43719</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>3542816</td>
<td>8778849</td>
</tr>
<tr>
<td>Value added</td>
<td>2579460</td>
<td>6455710</td>
</tr>
</tbody>
</table>

Source: Financial reports of Esteghlal hotel, 1996, 2000
management has been unable to appropriately use the new capital. So capital productivity indexes have decreased.

**Hotel productivity** is effected by internal and external factors. external factors included:

Economical conditions, law related to tourism industry, labor, foreign investment, taxes and existence of other competitors.

Internal factors include:

- Labor management, and quality management.
- In external factors for hotel industry, there exist 2 threatening factors:
  1. The absence of world large hoteling companies in Iran.
  2. Little knowledge in the field of quality management and appropriate servicing in the hoteling industry.

Cooperation and also common investment obviously we should think of young generation and the use of young trained labor.

Mentioned factors resulted in the decrease for the qualities of services presented by hotels in Iran and has let little competitors such as hotel apartments, little restaurant, pilgrim houses compete well with hotels.

Not appropriate use of the present capital has resulted a high price for hotels for their servicing. This in fact has led to the decrease in the domestic rate of occupation\(^1\). So costumers would prefer hotels, competitor.

Since tourism industry has a good perspective in Iran. Hotels must equip themselves with new knowledge on hoteling and improve their quality and labor managements. Moreover they have to create and present various services.

These hotels must think about presentation of more appropriate services such as food and beverage and other activities. They can lessen the price by the increase in sale and so they can compete with their domestic competitors.

---

1- Mostazafansg Janbazan Foundation, Tourism and Recreation Center, "Occupancy Rate of Hotels" 2000.
hotel in the year 2000 in comparison to the year 1996.

During the studied the ratio of value added remained unchange, (the ratio of value added to the revenue), showing appropriate growth in value added and revenue.

c. Labor cost

During the mentioned period value added productivity has changed from $4776 in 1996 to $1161 in 2000 and we have from $6560 in 1996 to $15789 in 2000, in the ratio of our income to the number of personnel (Table 3). This fact shows a stability in the number of labor and also appropriate changes in salary. This fact lies according to the value of the country’s currency and also the increase of revenue and the profit of hotel. The most important factor contributing to the better revenue goes to the increase of foreign rate of occupation and hotel's prices being in dollar.

d. Capital

Productivity indexes show that the part taken by profit in our value added during this period has known an increase. But for the reason of severe increase in the capital, capital productivity of value added has seen a decrease in year 2000 to year 1996.

III. Conclusion

Total analysis by value added component productivity indexes in Esteghlal hotel shows that during our period of study, this hotel has had a good growth in revenue and value added. Labor Productivity, too, has seen an increase but food and beverage revenue has not seen a good growth in this times.

Hotel capital for the reason of the renovation and reconstruction and also the use of good equipments, has tasted an outstanding increase but hotel
Since the number of indexes used are many in number, we have tried to use lesser indexes for the simplicity of conclusion.

B. Analysis on the value added productivity

The analysis of value added productivity is related to 4 factors:
- technology and management
- revenue
- capital
- labor cost

a. Technology and management

The equipment ratio indexes per personnel has increased from 626 in the year 1996 to 2910 in the year 2000. In other word, for each personnel there has been 4.6 times more of capital at hand. In other hand, equipment productivity show a decrease by %3.63 during the same period.

These 2 indexes show an increase in the investment put in the hotel for the purpose of resource equipting and it also shows an inappropriate use of them. So hotel's value added has no increased appropriately with it income.

b. revenue

Hotel revenues has seen an increase by 2.5 times during the mentioned period. Increase in sale has mostly belonged to the increase in the price of the rooms. Other services provided by hotel has not show an appropriate growth. One of the features related to all large hotles in Iran in the stagnation of services such as food, beverage, entertainment and sport, it shows that the market for mentioned services in not doing well.

The ratio of revenue to expenses has a decrease of %34 (%92-%59) from years 1996 to 2000. Which itself show a well growth and better profiting of
This hotel has 2 towers, Eastern tower and western tower. The eastern tower was renovated last years. In this process the most recent facility and equipments in the hoteling industry have been used.

To investigate the changes we will make use of the value added model which has been most practical in the Japanese corporation.

A. Calculating productivity Using value added methodology

In this study we acquired a methodology from productivity center in Japan. This methodology is a mixture of social accounting methodology and company accounting. (Sh. Masayushi, 1990)

From economics point of view in any national accounts, value added can be calculated in 2 different ways.\(^{(1)}\)

Since our case is in a company level, we will adapt the following formula.

\[
\text{Value added} = \text{Net revenue} - [(\text{raw material expenses} + \text{depreciation} + \text{other expenses}) + (\text{stock value at the beginning of the year}) - (\text{stock value at the end of the year}) \pm (\text{value added adjustment})].
\]

In analyzing value added, the relationships between indexes and their effect on technological factors; management, revenue, sale, and labor expenses are indicated.

In general, in this study we have acquired following indexes for our value added analysis of Esteghlal hotel:

- Value added productivity indexes
- Value added component
- cost indexes
- capital profiting indexes

To calculate productivity we have general accounting definitions. All number were calculated according to the rate of market for the price of dollar.

---

\(^{(1)}\) Tabibian, Mohammad, "Macroeconomic"
all Asian countries except Middle East Countries can be categorized into 2 groups.
- First: Countries in East Asia, and Pacific Ocean
- Second: Countries in the south of Asia.

The second group is consisted of India, Iran, Nepal, Pakistan Maldives and some other countries. The number of tourist arrived in these countries (group 2) in the year 1996 was about 4477 thousand %51 of which (about 2288 thousand) was for India (having the first palce) and about %10.2 of which (about 456 thousand) was for Iran (having the second place). The forecasts show an improvement in Iran's place in future. (WTO, 1999)

During 1990s there has not been an appropriate growth in the number of hotels comparing to the growth of arrival tourists.

In 1998 the number of rooms summed up to 17147, this number increased to 25th thousand in the year 1999. In other words in avarage there was a %7 increase in the number per year. New rooms, generally, belonged to 3 and 4 stars hotels. During these years there was not even a single 5 stars hotel built. (The Ministry of Islamic guidance, 2000)

Increase in the number of tourists with no appropriate hotel building to meet the need, all resulted in the over crowding of the Iranian hotels in the cities with attraction for tourists, these included Yazd, Isfahian, Shiraz. It is such that agencies face difficulty in high season in these cities.

New conditions can result in an increase related to the rate of occupation and concurrently it can enhance the rate of return.

II. Case study on the productivity in Esteghlal hotel

Esteghlal Hotel is the largest hotel in Iran. Presently it belong to Azadi Hotels Co.

It is a 5 star hotel, having 540 rooms, situated in Tehran, capital city of Iran.
directly related to all, practically doing the work.

This paper, first is going to have a quick glance at the situation of hotel industry in Iran, and will discuss changes in the industry’s policies, it’s revenue indexes and finally its place in the economy of Iran.

In the second part it will investigate the methodology in the form of value added for the calculation of productivity based on accounting concepts. This will enables one to measure the productivity and quality.

In the last part productivity indexes of Esteglal Hotel for the late 20th century using value added methodology will be analyzed. In our final part, having in mind the internal and external factors, we will see the changes in the productivity of this hotel in Iran.

I. The situation of Hotel industry in Iran

Tourism industry has seen ups and downs and changes through out the last 3 decades of the 20th century. For this industry the last year of 70s and 80s decades has been the time of stagnation. During these years Iran faced yet decreasing number in tourists arrival. We can mention in the year 1978 Iran was the host of 500 thousands tourist but this number decreased to 70 thousands in the next ten years. Improvement were due to the first plan of government in 1988 and with the start of a good political relationship with tourist generating countries, so Iran faced an outstanding growth in this industry. (The Minstry of Islamic guidance, 1999).

In 1999 the number of tourists visiting Iran reached up to 1.3 of a million and as predictions showed by the end of the year 2004 we will see an increase in this number by the rate of 24%. So the expectant number will be 4000/000. This fast growing rate in recent years, has had strengthening effect on the place of Iran in the world of tourism. (The Ministry of guidance, 1999).

According to the worldly Zone identification done for tourism activities,
have new knowlege in the field of quality management and connections to the world net of hoteling.

**Subject Definition**

Productivity is the standard by which human power in using resources for the achievement of his desired goal, can be determined. Various techniques and methodologies for the better use of Machinery and human resources were introduced after Feredriks Taylors systematic approach in management in the early twentieth century. All of the introduced techniques emphasized on the manufacturing and economical efficiency in the producing organizations.

Productivity Standards are of most general Standard used to better identify and evaluate the function of managing of a country in using resources. In the recent decades these standards are also used in the service sectors.

To measure productivity for the service sectors following elements are to be considered:

1. Efficiency or optimal use by the resources.
2. Effectivity or the conception of a good work which in the service sectors depends on three factors:
   - Service quality
   - Flexibility
   - Creativity and innovation

If possible, in the measurement of the productivity in the service sectors has to be diaспектual. First having supervision on the financial and economical and strategical indexes through out organization; such as value added per personnel and or the return of the capital and the ability to compete in the labor cost and then next aspect involves internal standards.

Productivity changes in hoteling industry in Iran
(as a Case Isteghlal Hotel)

Mohammad Reza Farzin (Ph.D)
Faculty member of Allame Tabatabaee University

Abstract:
Productivity is the standard by which human power in using resources to achieve their desired goal, is determined. In recent years this standard has seen an upmost attention in calculating technologies in industrial and service productivity industries. Value added methodology is a comprehensive way of measuring producing of all producing factors in a particular unit. In this case study we have interested recent changes in the hoteling industry in Iran, along with our investigation we have selected Esteghlal hotel. A 5 star hotel located in Tehran-as our case study. We have analyzed the productivity of this hotel in the period of 4 years (1996-2000).

Results has shown that the foreign rate of occupation of hotel rooms-has increased in this hotel. Which in turn has resulted in an increase in hotel revenue. But still we have not seen any creativity and change in other parts of the hotel such as food and beverage.

There has not been an optimal use in new capitals and equipments in this hotel. To see more improvement in the hoteling industry in Iran, we have to