

## Review Article

# The Modeling of Shares and Best Conditions in Stock Market on Economics

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## Article History

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**Abstract:** The relationship between investment and shares is established to find the intrinsic nature. It is found when the best labour is 6 the cost is low and the number of shares are 1000 with the intersection of 1 RMB which is turnover point. When the best capital is 1RMB the cost will be 70 RMB and the turnover point is 600 of the number of shares with the 5 RMB. Since  $PI > P_k$  they are the least when the total product is bigger too. The biggest average product has been from 2,000 to 5,500 pieces while the biggest total product may be an arrangement of 7,000 and 40,000 pieces. The least total cost may be 150Yuan/one.  $P_k$  is bigger the least cost is good.

**Keywords:** Modeling; investment cost; shares; stock market; economics.

## 1. INTRODUCTION

The investment and shares is a behavior with investing certain money and requiring revenue from investment and shares in stock market. This process includes buy and sale shares in order to form the profile of shares so it is a process which completes these two functions in whole process. The profit is calculated through revenue and shares which is an important factor in this process. In this paper the revenue has been computed and drawn from their relation with cost. The revenue and AC, AVC & AFC which is shares is investigated for searching their change in these processes. For the better benefit it must be studied further it can gain the profit use. Since the stability is key as for this procedure. How we can define stable and low cost parameter is significant matter. For the inference the different drawing between profit cost and quantity is made to analyze the change and low cost situation in this study. The constant labor L & capital K is defined to fit to cost value for this process [1-4].

The least total cost has an important role with the quantity & labor. Because the least one is evaluate the cost per labor under the best labor and capital on economics. If the cost is big it will increase cost burden. Only if the least cost can decrease the cost price and the reasonable choose may be used in determining the total cost. Because of its availability it may be chosen for other factor such as the random price promotion. In this paper the revenue is adopted from higher value to check the piece and the cost value. So as to higher revenue the low cost value and low pieces is necessary. For the sake of the least total cost the best labor and capital has been established firstly and then determined the least total cost equation with quantity and labor.

## 2. MODELING AND DISCUSSIONS

The Investment and shares has been established according to modeling with economic equations that has a certain role in stock market. So Cobb-Douglas function is used to complete the modeling. The detail establishment and modeling is as related literature.

The Cobb-Douglas function is

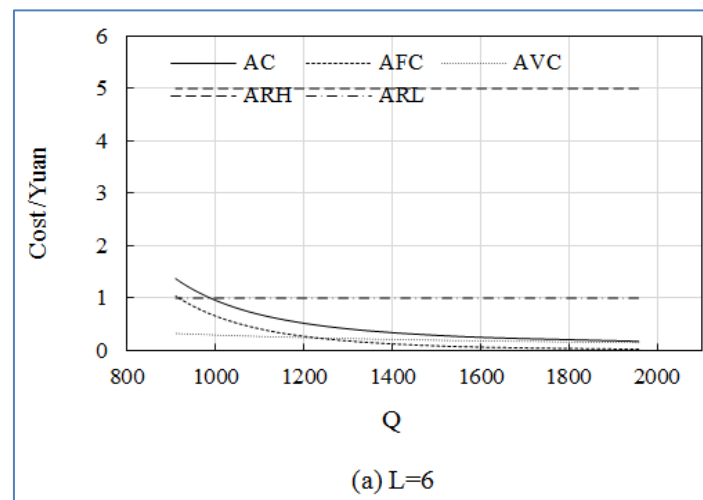
$$Q = \gamma L^\alpha K^\beta \quad \text{--(1)}$$

**Table-1: The conditions of original parameters and coefficient**

Parameters No.	L /One	K /One	Q /Pieces	$\alpha$	$\beta$	$\gamma$
1	0.1	0.1	100	-	-	-
2	0.2	0.2	200	-	-0.69	-
3	0.3	0.3	300	1.69	-0.41	1413
4	0.4	0.4	400	1.41	-0.29	1113
5	0.5	0.5	500	1.29	-0.22	1045
6	0.6	0.6	600	1.22	-0.18	1021
7	0.7	0.7	700	1.18	-0.15	1010
8	0.8	0.8	800	1.15	-0.13	1004
9	0.9	0.9	900	1.13	-0.12	1001
10	1	1	1000	1.12	-0.11	1000
Average	-	-	-	1.27	-0.26	1076

Here Production quantity Q;  $\gamma$  is technique coefficient;  $\alpha$  is producing labour;  $\beta$  is capital elasticity. K is capital; L is labour; AFC is average fixed cost; AVC is average variable cost; AR is the average revenue; TR is total revenue. The calculated constant is  $\gamma=1076$ ;  $\alpha=1.25$ ;  $\beta=-0.26$  respectively. The parameter  $P_l$  is labor price and  $P_k$  is capital price. They are 300 and 500Yuan respectively. Turnover is in terms of 5Yuan per share and Q is piece of shares. Table 1 shows the parameter of constant value with labor and capital & quantity. It is chosen that 10groups value to acquire average ones. The detail narration is expressed as below.

It is found when the best labour is 6 the cost is low and the number of shares are 1000 with the intersection of 1 RMB which is turnover point from Figure 1(a~b). When the best capital is 1RMB the cost will be 70 RMB and the turnover point is 620 of the number of shares with the 5 RMB. So the balance value is 1~5RMB which could be satisfactory with both situations because the average revenue 1RMB can't be intersected with average cost line in the case of the lower than 1400shares. The heavy one is capital and then labor because the much RMB happens in capital. So the capital may be main effect factor to cost value and then the labor. It is by the best labor and capital that is calculated whereas the best one value is different. So the bigger labor occupies more space therein has low RMB value whereas the capital is high one which is concluded in this paper. The other one is the Cobb-Doglas function problem which has a certain tolerance. The coefficients has a little deviation problem.



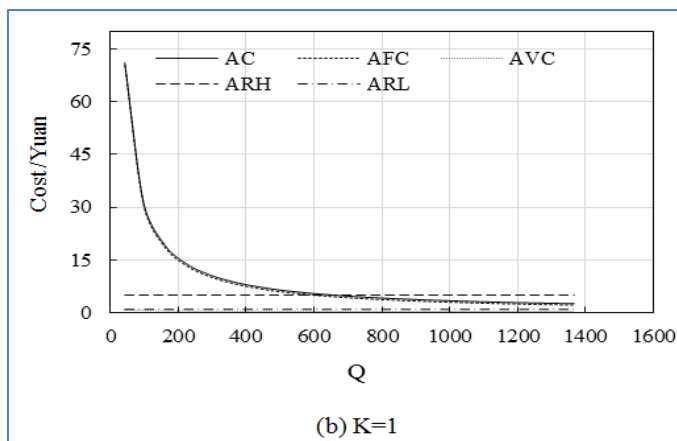


Fig-1: The relationship between cost and number of shares

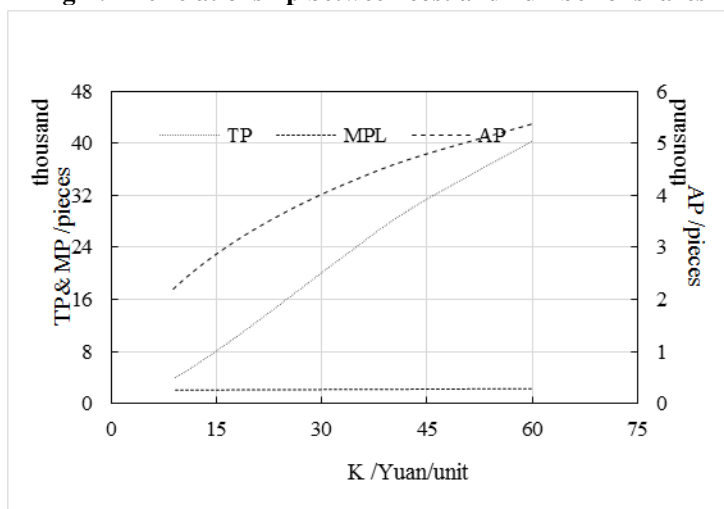


Fig-2: The relationship between maximum & marginal production and number of capital

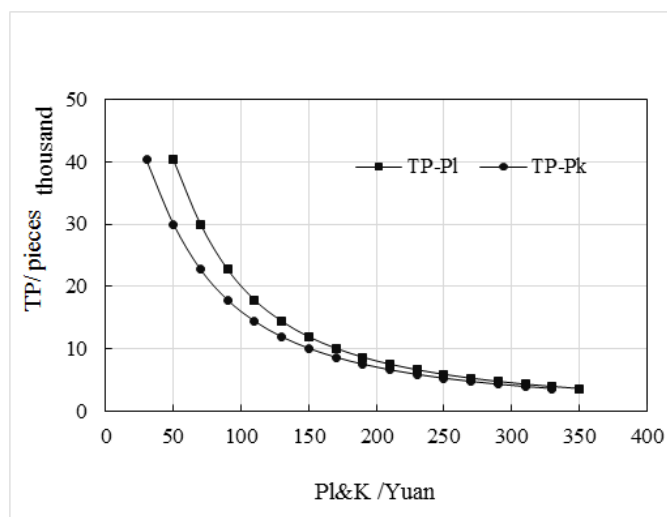
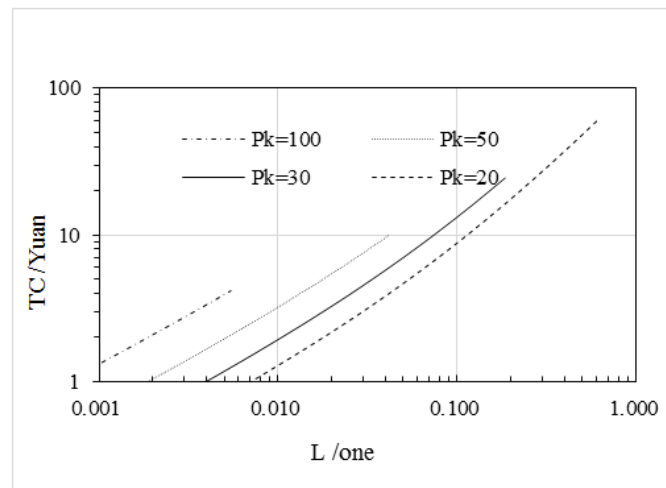


Fig-3: The relationship between maximum production and price of labor & capital

From Figure 2 the best total shares will increase when the K increases from 2,000 to 40,000. The average shares will increase too from 2,000 to 5,000 too while capital increases. The best shares lie in 60Yuan/unit. It explains that the increasing capital unit will increase the revenue. When the price of labor and capital increase the maximum number of shares will decrease. It ranges from 40,000 to 5,000 shares. It expresses that increasing the price will cause maximum shares decrease which is not benefited to us. So the price is needed to decrease to certain value like 30~100 Yuan. On the other side the quantity of Pl is bigger than Pk. So  $Pl > Pk$  is the effective turn.



**Fig-4: The minimum cost with labor quantity and 1000 pieces under different Pk**

In Figure 4 it is expressed that the minimum cost will increase with the labor increasing. Meantime it increases when the Pk increases from 5 Yuan to 80 Yuan. In short the AC will intersect with AR ie shares so it is benefit to us if the turnover point is small. The smallest shares will be in the condition of capital being 60Yuan/unit and Pk being 30 Yuan besides labor with high Pk of 100. The Pk is bigger the least cost may be good. If seeing the longitude the Pk is bigger according to 20, 30, 50& 100 RMB/labor with the bigger labors. It explains that the least one may be acquired with higher capital price. So it is chosen with high capital or labor.

In general the biggest product is 40,000 pieces ie. About 120,000Yuan when the capital approaches 60 units. The least cost is 150Yuan each labor.  $K>L$  &  $Pl>Pk$  is the turn to affect cost and total product value respectively. The more Pk is the total cost has the low value.

### 3. CONCLUSIONS

1. The biggest total cost has been established to find the labor and piece. It is found the 40,000Yuan are the biggest total cost at capital of 60 Yuan/unit with  $\gamma=1076$ . Meantime 1000 shares and 625 shares are turnover point with 1Yuan and 5 Yuan revenue.
2. The biggest total cost will happen which attains 40,000 shares at  $Pk=30$  and  $Pl=50$  ie. Low Pl firstly and it will increase with low Pk secondly. So we firstly choose low Pl and then low Pk. The smallest shares cost will be minimum in the condition of labor with high Pk. The more Pk is the least total cost is.

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