



The Modelling of Shares and Low Parameter of the Best Condition in Stock Market with High investment on Economics II

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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 29 the number of shares are 63 thousand with the intersection of 5 RMB which is turnover point. When the best capital is 5RMB the best quantity will be 63 thousand shares with labor increasing. Meantime the biggest total share will happen which attains from 500 to 4,000 thousand when the total cost is 100,000Yuan. The smallest shares cost will be minimum in the condition of labor with high Pk. It is observed when laobr is one the minimum TC is 5,000~15,000 according to Pk=800 and 280Yuan respectively.

Keywords: Modelling; High investment; Shares; Stock market; Economics

Introduction

The investment and shares is a behaviour with investing much 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 relationship 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 [1-3]. The least total cost has an important role with the quantity & labor. Because the least one is evaluating 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 [4,5]. 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 [6,7]. In the study the detail research has been completed with low investment of 1000 shares Now we discuss the detailed search with high investment of 100,000 in this paper. We looked forwards to finding more reasonable one by this study. Through parameters of shares and cost the destination with low cost and the least cost will be hoped to find.

Modelling and Discussions

The Investment and shares have been established according to modelling with economic equations that has a certain role in stock market. So Cobb-Douglas function is used to complete the

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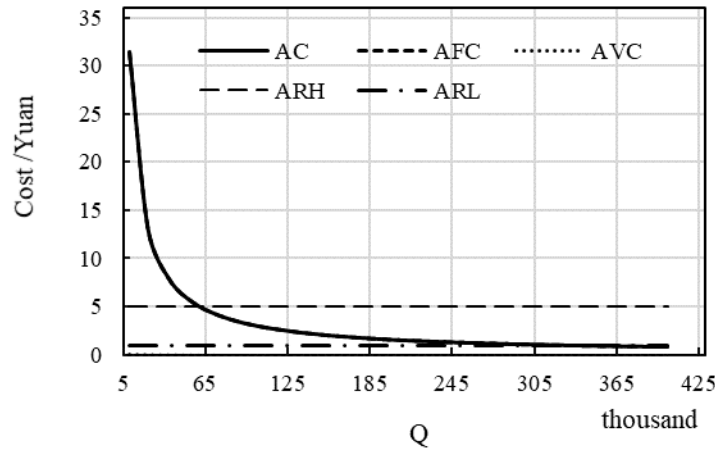
modelling. The detail establishment and modelling is as related literature.

The Cobb-Douglas function is

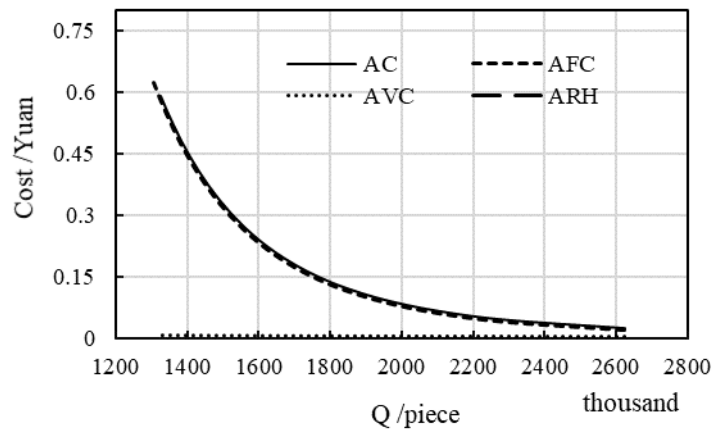
$$Q = \gamma L^\alpha K^\beta \quad (1)$$

Here Production quantity Q ; γ is technique coefficient; α is producing labour; β 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 $\gamma=106086$; $\alpha=1.25$; $\beta=-0.2$ respectively. The parameter PI is

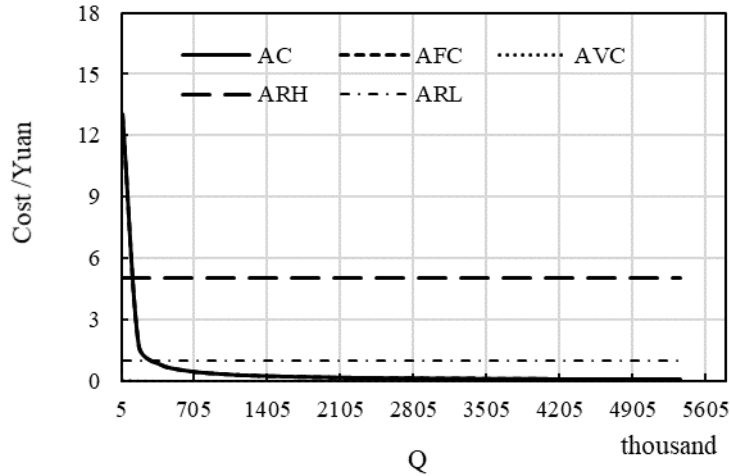
labor price and P_k is capital price. They are from 200 to 300 and from 300 to 800 Yuan respectively. Turnover is in terms of 5Yuan per share and Q is piece of shares. Table 1 shows the parameter of constant value with labor and capital & quantity. It is chosen that 10groups value to acquire average ones. The detail narration is expressed as below (Table 1) (Figure 1).



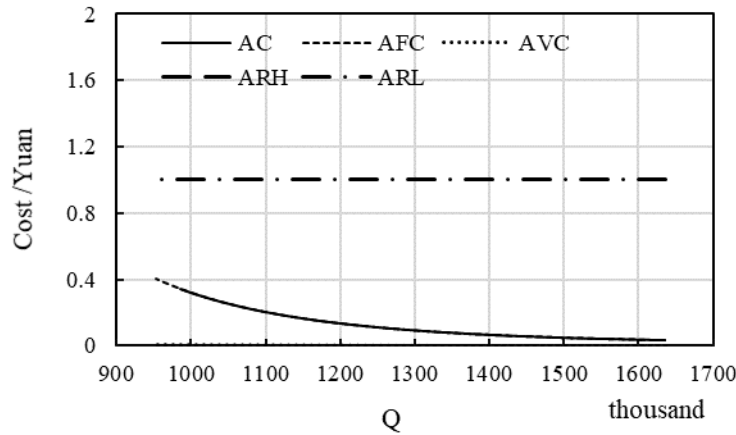
(a) $K=375$; PI & $P_k=300\&800$



(b) $L=29$; PI & $P_k=300 \& 800$

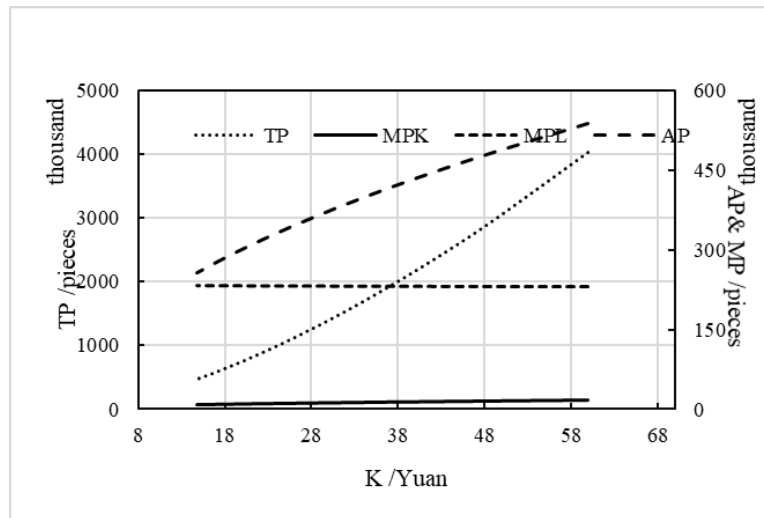


(c) $K=375; P_l \text{ \& } P_k=200\&800$

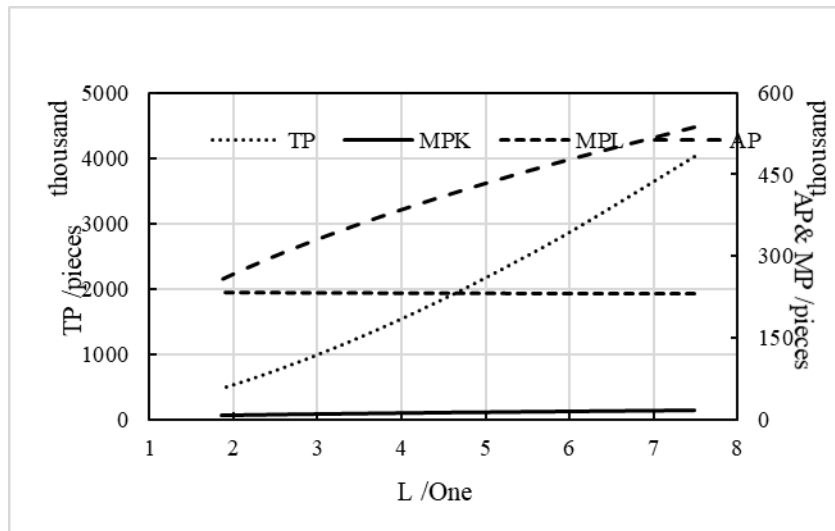


(d) $L=19.76; P_l \text{ \& } P_k=200\&800$

Figure 1: The relationship between cost and number of shares according to different conditions.

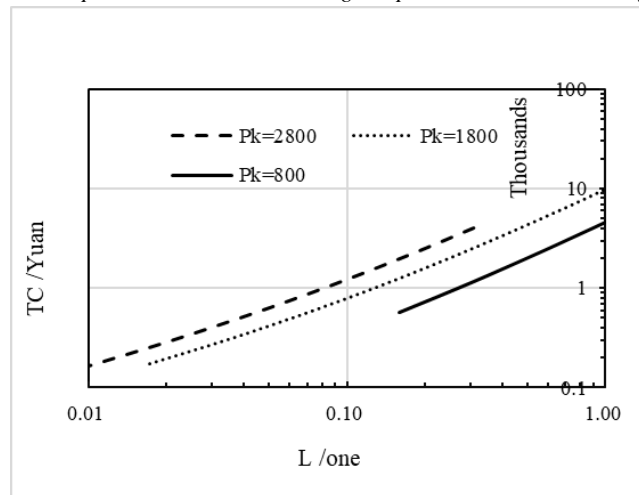


(a) K

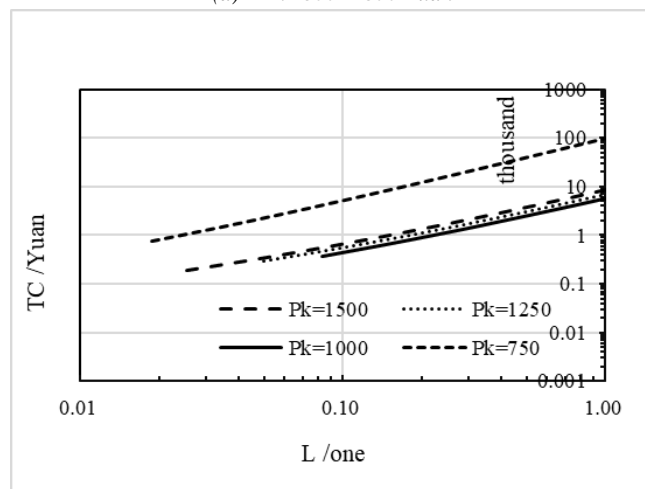


(b) L

Figure 2: The relationship between maximum & marginal production and number of capital and labor.



(a) $P_k=800\sim 2800$ Yuan



(b) $P_k=750\sim 1500$ Yuan

Figure 3: The minimum cost with labor quantity and 100,000 pieces under different P_k .



It is found when the best labour is from 19 to 29 the number of shares are 250 thousand with the intersection of 1 RMB in Figure 1(a) with $K=375$ which is turnover point from Figure 1(a~d) according to the PI and Pk from 200 to 800. When the best capital is 375RMB the turnover point is 63 thousand of the number of shares with the 5 RMB in Figure 1(a). So the balance value is 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 one higher than labor of 19 for example 29. The intersection with 1RMB is 250 and 300 thousand in the above two cases. It exceeds big the 100,000 so the 1RMB is insufficient which needs to be promoted. The bigger one which accounts for the turn with more than 5RMB is available.

Table 1: The conditions of original parameters and coefficient.

| Parameters No. | l | K | Q | α | β | γ |
|----------------|-----|-----|----------|----------|---------|----------|
| 1 | 0.1 | 0.1 | 10, 000 | - | - | - |
| 2 | 0.2 | 0.2 | 20, 000 | - | - | - |
| 3 | 0.3 | 0.3 | 30, 000 | 1.69 | -0.41 | 141391 |
| 4 | 0.4 | 0.4 | 40, 000 | 1.41 | -0.29 | 111396 |
| 5 | 0.5 | 0.5 | 50, 000 | 1.29 | -0.22 | 104575 |
| 6 | 0.6 | 0.6 | 60, 000 | 1.22 | -0.18 | 102107 |
| 7 | 0.7 | 0.7 | 70, 000 | 1.18 | -0.15 | 101010 |
| 8 | 0.8 | 0.8 | 80, 000 | 1.15 | -0.13 | 100461 |
| 9 | 0.9 | 0.9 | 90, 000 | 1.13 | -0.12 | 100166 |
| 10 | 1 | 1 | 100, 000 | 1.12 | -0.11 | 100000 |
| 11 | 1.1 | 1.1 | 110,000 | 1.11 | -0.10 | 99904 |
| 12 | 1.2 | 1.2 | 120,000 | 1.10 | -0.09 | 99849 |
| Average | - | - | - | 1.24 | -0.18 | 106086 |

It is expected that the revenue has been increased so that the share decreases to normal level. Meantime the labor is somewhat higher according to the Cobb-Douglas function than capital. In Figure 1(a & b) the normal share value exhibits the normal one will be formed in this study. The same value is from 100 to 300 thousand with 5 RMB and 1RMB respectively at $PI=200$ and $Pk=800$. Therefore, because the intersection with 1RMB is higher than 100 thousand shares and promoting revenue is necessary for the sake of sale. To say more if labor increases share will increase. The share will increase from 900 to 1,000 thousand when the labour is from 19 to 29. From Figure 2 the best total shares will increase when the K & L increases from 16 to 60 and from 18 to 7.5 respectively in the total cost of 100,000 Yuan. It is under parameter with $PI=1000\sim 4030$ and $Pk=1670\sim 6730$. The average shares will increase too from 250 to 500 thousand too while capital increases. The best shares lie in 500~4,000 thousand Yuan. It explains that the increasing capital will increase the revenue. When the price of labor and capital increase the maximum number of shares will increase. It ranges from 500 thousand to 4000 thousand shares when capital ranges from 16 to 60. It expresses that increasing the price will cause maximum shares increase. MPL maintains 250 thousand level meanwhile MPK stays 20 thousand (Figure 2,3).

In Figure 3 it is expressed that the minimum cost will increase with the labor increasing. Meantime it increases when the Pk

increases from 800 Yuan to 2,800 Yuan. The smallest shares will be in the condition of capital being 10,000Yuan with labor of 1 and Pk being 800 Yuan besides labor with high Pk of 2800 which accounts for higher PI related to Pk . It reaches the maximum value with total cost TC of 10,000 Yuan at laobr of 1. If extending the curve it is observed when laobr is one the minimum TC is 5,000 Yuan with $Pk=800$ Yuan. The one will be high with the Pk which reaches maximum. Total cost has the tendency that approaches one. It explains the availability has been formed in this study. The one with $Pk=800$ Yuan is the smallest total cost wherein $Pk=2,800$ Yuan is the highest cost with 15,000 Yuan on the contrary. The middle one is 10,000 Yuan with $Pk=1800$. the effective turn is Pk with $800 > 1800 > 2800$. Through comparing the two figures in Figure 3(a & b) the $Pk=800\sim 2800$ has low total cost than $Pk=750\sim 1500$. That may be caused by the parameter PI and others.

Conclusions

It is found when the best labour is 29 the number of shares are 63 thousand with the intersection of 5 RMB which is turnover point. When the best capital is 5RMB the best quantity will be 63 thousand shares with labor increasing. Meantime the biggest total share will happen which attains from 500 to 4,000 thousand when the total cost is 100,000Yuan. The smallest shares cost will be minimum in the condition of labor with high Pk . It is observed



when laobr is one the minimum TC is 5,000~15,000 according to $P_k=800$ and 280Yuan respectively.

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