



# Enterprise Cost Control and Its Linear Regression Modelling

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## Abstract

Modern enterprises gradually put cost control in the first place to study has become a topic of discussion. Companies are gradually into the modern, networking and intelligence. Therefore, the evaluation of enterprises is becoming an important issue. Many university professors have gone beyond the laboratory and the school to the enterprise. They are no longer just in the school world but also in the corporate world. School linear regression modelling has become a touchstone to solve the social difficulties in all directions. The university linear regression modelling competition has put forward and modelled the social practical problems as the main data so as to get the normative things from the combed formulas. This puts observation and problem solving on the agenda, and predicts future trends in order to prepare for the present. All kinds of linear regression modelling methods are put forward like snowflakes and compared with traditional models to promote the mutual development of the new and the old, so that the differentiation and excellence between different methods can be found, and the development of each other. In this study the enterprise cost control has been analyzed and linear regression equation has been studied and find they may be significant and controlled a certain by linear regression equations in theoretical equations.

**Keywords:** Enterprise; Cost control; Modelling; Investment; Research and development; Linear regression

## Introduction

For income and expenditure, we will start with a simpler coefficient formula, and then we can evaluate it to see what the error is with the actual value. Such as bearing load and fatigue wear, this is the subject we should seriously study. I can also make a regression curve from some survey reports in some books with actual measurements. These coefficients and error estimates are then re-examined to see if they get better and more accurate. There are a lot of formulas in economics costing that need to be investigated and the Numbers plugged in to see what happens. And calculate the error to see how accurate it is. And compared with other papers or data values, how error. Can meet the practical application. Good error situation can be considered for trial or even a large range of promotion. There are many ways in economics to study stock prices, bank losses and so on. Its accuracy can also be evaluated to find out the best evaluation method and its application range. In what aspects is it applicable? See if it works for some of these economic phenomena? The

result? If all aspects are close to the prediction, it shows that this method is worth applying to the evaluation and prediction of this kind of economic law. Methods such as ARM are now used to predict and evaluate securities, but how accurate they are has not been studied. There are studies in Japan that have been supported by large scale data calculations, so we need to further study. There are some economic statistics and other methods mentioned in economics books but it is not clear which methods are used for which assessments. They studied what experiences they had to determine and they didn't come up with. So we use other methods such as least squares regression coefficient calculation to some traditional methods to evaluate or have other formulas and method will be more suitable for large-scale computing classification of these cloud data and results evaluation, data is the evidence we can start with the rationality and discusses the mathematical side, it is seriously considering this method might be a problem? Are there any improvements or updates to the actual meaning of the coefficients? And carefully do the error

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assessment. With raw materials the regression model can be estimated and through error to judge the precision of them. So the reasonable and feasible value is important which needs to be investigated and simulation. To compare with new way to find the preciser one for confining methods. Through many investigations and theoretic equations the best ones will be found to resolve the correct ways.

## Discussion and Analysis

For a company, in addition to the costs and wages of purchasing items such as raw materials and plants, there is also the invisible capital of fixed items such as the wear and tear of machinery. This should calculate its rate of consumption, that is, how much is it per day, how much is it per month, and how much is it per year? Deduct this part to be working capital, just can pay personnel's salary and reinvest next year. Reinvestment seeking to expand reproduction is a large-scale production to reduce costs and increase profits. The reinvestment ratio needs to be in line with the amount of profit and fixed capital going into working capital. Do not invest too much, because too much money will cause too much risk, loss of balance and control. How much machinery and equipment and plant and labor would be needed to make the plan work. What will its odds be if the price or quantity is not enough [2]. These require careful planning. So an enterprise whose income is greater than its expenses is its profit, and if its income is less than its expenses, it will go bankrupt. So in the short term debt suspension, in the long run, must be transferred as soon as possible to achieve profitability. For example, Iacocca, the former President of Chrysler in the United States, applied for financial aid from the United States congress and obtained billions of dollars of government loans after taking over the failing Chrysler. He persuaded representatives in the congress to help him and brought Chrysler back to life. In addition, he recruited veteran experts from Ford retirees and current Ford cadres to serve him, appointed several secretaries of the Treasury and quality promotion, and collectively transferred more than 10 experienced technical talents from ford to expand the r&d team, so as to make Chrysler a new company. Iacocca received a symbolic \$1 a month during the difficult first year. It was this cost-saving, last-ditch spirit that led Chrysler to launch its first viable car, selling thousands because it was a premium consumer brand. And then it became the second largest car company in the United States. If you have time, you can check out Iacocca. Here Iacocca first accepted an offer from Chrysler, then he hired Ford's veteran economist and got a loan from congress to pull Chrysler out of its slump. It is not a good time to launch research projects - new models are the key to its rebirth. As owner and chairman of the board of Apple Steve jobs immediately after the new developed luxury conference room at the hotel in terms of product presentation and vigorously promote new products, launched after

he launched the first paragraph I - Pod I - Pad (tablets) and I - Phone landmark of network communications products that apple has become the world's Phone and I - Pad (tablets) brand. And took a bite of Apple after the shape of the product brand -Apple. I stands for intelligent product. Therefore, in order to turn the loss into profit, we must obtain loans to develop new functional products, and then vigorously promote the acquisition of orders, and it is not appropriate to carry out product updates to protect the new life of the company. Is the reputation of the company is still constantly upgrading products, after-sales technical services without interruption. Because the customer has the quality assurance and the first purchase has the after-sale service the big brand goods. Haier, "the first of the world's top ten white brands", whose global turnover accounts for 60% of China's total, also puts forward the business slogan of "integrating people and orders", which indicates that makers are closely connected with customers, and customers' requirements are the requirements of enterprises under the network. It also shows the importance of research and development. Now Haier smart products have become the industry pioneer. Haier has 29 overseas manufacturing plants in the world. Haier USES the type of capital and investment to carry out large-scale "local" production in developed countries, and its production and sales are around "local". This ensures that shipping costs are reduced. Selling products to local people is recognized to relieve the pressure of domestic employment. There is a question of cost, how to reduce the cost and increase the profit, and that is one of the ways that we are looking for, every quarter. Once a month or a few months, we set up an equation based on the data to find the effective equilibrium point, which requires us to investigate first and then calculate to see when to invest where to invest and when to buy materials. If we take too long, this will affect the time of proper investment and purchase, delay production, resulting in production discontinuity. The future of the enterprise is an unpredictable state, but if this formula is too simple, it will not reach the optimal balance of actual requirements. There is always a certain time frame for investment, which requires us to formulate its data according to practice and theory and make mathematical calculations to find the most appropriate time frame. What needs to be combined with market research to predict or work out which investments are better, and how much to report? We need to implement the calculation and evaluation to know exactly how much the project benefits. For example, based on the relationship between output  $Q$ , labor  $L$  and capital  $K$  of Cobb-Douglass Function  $Q = \text{capital } L$ , the value of  $Q$  can be calculated, and then the amount of liquidity and fixed capital input, such as wages and raw materials, can be deducted to obtain Benefit. The linear regression model may be solved through error  $R^2$  for some status.  $R^2$  is the regression sum of squares/general sum of squares. It is error value and if it is small the error which



we adopt is big, on the contrary if it is big near 1 the error is small. It can be used many statuses like any linear regression model establishment in experimental economics and physical calculation. Like economics, finance, financial, economic, accounting economics, and econometrics, this type of it also many, so accounting Hitotsubashi university in Japan even if he is in the world, also is in the top. So he is a university is not lose the blessings of some data, specifically for the public and his results must carry on the detailed calculation and the conclusion. So he this has become a kind of public such an MBA have what professional think of him the MBA is more fierce have like Switzerland of what MD, still have activity, like these countries are like not quite clear, estimation should be similar to Japan. So now the university is a system with a few in China and I will say that I am an honorary professor working for him and he is the channel ah, I know it will be a bit late. If not, he is an MBA player, and then he is an eighth grader, and then he will continue to work there for several years. After that, he may be transferred to a rural family for long-term research. And of course his professor, who is also from the United States, you wrote a lot of papers, so it's better for him to compensate for this momentum. The R&D cost control will be important more and more in world. For the sophisticated company it will play key roles in idea of new production which can fit to the prevailed competition between companies. Its importance is no doubt in creative contemporary and future market demand. It can determine triumphant and failure in competitive markets. As Haier proceeds world competition through establishing factory in USA etc. world place to obtain creative mind for productive design of R&D department for occupying the world market. The more R&D quantities have been the more creation will be, which is a way to occupy world besides domestic markets tightly. On the other hand the linear regression equation in economics will help the R&D to find the digital curves for current & next several years financial plan and prediction. It must be investigated that the raw data for equations is searched clearly. Then the coefficient has been confined and the model will be done. It needs to observe the error  $R^2$  in order to ensure the precision on linear regression equations and in the end gain correction solution. That has been used to R&D development and investment in a company so the best solution may be obtained, like staff quantities and capital quantities every year or three years. Overview according to each company situation the R&D cost can be changed and 10~15% investment is available in general. For stable increasing the amount needs no more than 20% every year.

## Conclusion

- Here production and inputs are key. If we want to increase the benefit, we need to increase the output, and we can get a larger profit if we reduce the input capital. And the case that

investment capital increases needs to increase a certain number of production, is the number of orders. In order to ensure that the amount of investment in the conditions of large increase, can obtain greater benefits. We can calculate the Q value, and then deduct the amount of working capital and fixed capital input, such as wages and raw materials, to obtain Benefit.

- A coefficient a and we will get another b then. Moreover we can use more sophisticate and more complicate way to a producer. You are the best way to choose alternative. According to the optimum management, you are full of a tactics of balance. It is available to our factory and the best balance profit will be acquired by us.

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