

Teaching Research on Enhancing the Charm of Time Value of Funds

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Abstract: The time value of funds occupies half of the financial management. It is a basic skill of financial management, and is consistent with risk management, but the difficulty is far greater than risk management. Deeply understand the connotation of the time value of funds, grasp the position and role of the content in financial management, master the teaching methods appropriate to the content, reasonably arrange the number of hours of the content, the charm of the time value of funds can be revealed, the difficulty will eventually be replaced by charm, the teaching effect will be greatly improved, and the difficulty factor of financial management's overall content learning will drop significantly. Financial management can be realized at a higher level and status in curriculum construction, professional construction, and career planning.

1. Introduction

The time value of funds is a basic skill of financial management. It is in keeping with risk management. Mastering these two basic skills can make rational decisions in financial management and other time-related financial decisions, in order to better compete. Time and risk are essential qualities for rational financial people. However, the time value of funds is far more difficult than risk management. The understanding of concepts, the calculation of indicators, and the radiation of content all go beyond risk management. During the course of the course, the teacher spent a lot of time in teaching time, teaching methods, curriculum design, etc., and spent a lot of effort, but did not achieve the expected results.

Introduce information elements, adjust teaching methods, and re-arrange the number of hours of the content. The selection of cases is typical. The embedding of cases begins with the concept and effectively utilizes the ARCS motivation model to further enhance the teaching effect. The learning of content has changed from pain to fun, and the learning of financial management content has become easy and interesting. It can analyze the mortgage, wealth management, and entrepreneurial project decisions in life, analyze the cost and benefits of securities investment and financing, and use the time of funds. Value organically links the overall content of financial management, and the teaching effect of financial management will become very good. The time value of money is endless.

2. Overview of the time value of funds

2.1 The meaning of capital time

The time value of funds refers to the value added by the funds used over time. This value added is that the funds must be used, and there is time to continue. The money placed under the bed is not worth any value. At the same time, there is no risk in this value-added, which is the average profit rate of social funds. Value added has grown exponentially over time.

2.2 The nature and type of time value of funds

The essence of the time value of funds is the portion of the total amount of money that has been transferred over a period of time after the period of time. This extra part is $sTable$ and can be achieved without any risk, including inflation risks. Therefore, the calculation of the time value of funds is

converted into the calculation of interest.

There are two types of interest calculations, single interest and compound interest. In the calculation process, compound interest occurs according to the characteristics of the funds used, and an annuity appears. The annuity has an annuity, an ordinary annuity, a deferred annuity and a continuing annuity. The conditions, characteristics, and application of specific scenarios of these four annuities use formulas, etc., which are difficult for students, confused students, and put demands on teachers' teaching, but this is precisely the charm of the time value of funds.

3. The time value of funds, teaching, learning status

Financial management is a professional core professional course of accounting major. It is a compulsory financial upgrading course after basic accounting and financial accounting. The accounting profession is opened earlier in China, so the time for financial management to be introduced into universities is also earlier. Management accounting from 1952 After the introduction of the year in the country, in the late 1980s and early 1990s, colleges and universities also opened management accounting courses. The time value of funds in financial management and management accounting was at the core, but the difficulty and confusion have long puzzled teachers and students.

3.1 Students' feelings about the time value of funds

Financial management and management accounting allow students to feel the depth and breadth of the accounting profession, which in some ways stimulates students' expectations and interests. However, the study of the time and value of funds makes the students' interest and desires drop rapidly. There is no problem with the formula, but the time of use of funds changes, such as from the end of the period to the beginning of the period, or the special situation occurs when the middle is broken once or twice. At the time, the students were at a loss. When to use the present value of the annuity, when to use the final value of the annuity, the deferred present value, and how to adjust the final value will make the students confuse. In a questionnaire survey, 80% of the students said that the time value of the capital is too difficult to learn, and only 20% of the students said that it is very interesting.

3.2 Feelings in the process of teacher and professor

Because they understand the importance of the time value of funds in the development of financial management courses and professional construction, teachers have invested more time and energy, choose cases, squeeze time, deformed, find heterogeneous, and think that they will talk about capital time very much. Thoroughly, the problems related to the time value of funds encountered in work, study, and life in the future are thoroughly explained. Even PPT is not used. It is not afraid of hard-working blackboards with one word and one sentence. In fact, the time value of funds is very high. Simple, the students are stunned, and the students' scores on the teachers are far from the highs of other courses, teachers, and students' grievances. Can't delete it, can't simplify it, and linger between conscience and helplessness. In the questionnaire survey, 70% of the teachers said that they were tired and confused. 20% of the teachers said that they were OK. The students could accept it. Only 10% of the teachers said that the content was very interesting and liked.

4. Create a unique teaching research method system

4.1 Introducing informational teaching elements

Maximize the use of the advantages of the Internet, the concept of time value of funds, the derivation of formulas, the type of annuity, the application of annuities in specific scenes in the form of micro-classes, the animation effect is better, Matthew effect (one master three servants) An example can be used as a reference to a conceptual understanding.

4.2 Derivation formula

In the case of annuity termination, annuity present value, and perpetual annuity knowledge points,

in most cases, the teacher believes that the formula is ready-made and can directly tell the students to use it. In fact, the derivation and source of the formula are more conducive to students' understanding of the formula and Use, lead the students to the blackboard, use the equal ratios, limits and other knowledge to lead the students to explain and guide the deduction, so that students understand the ins and outs of the formula, the use of conditions, precautions, which is very helpful for students to master the knowledge.

4.3 Selected cases

1). Case selection when understanding concepts

From the beginning of the concept, the case is introduced, and the selection of the case can be classic or modern.

Case 1, the agreement of Napoleon's bouquet of roses. When Napoleon spoke at the First National Primary School in Luxembourg in March 1797, he said that in order to thank your school for his hospitality to his nuclear lady, he would give their school a bouquet of roses on this special day, and start today. In the future, they will give their school a bouquet of roses every year on this special day. In the days that followed, I was struggling to cope with the political events and the constant wars. The agreement had already been forgotten by him. After 187 years, in 1984, the promises of the year were fulfilled. They wanted to use a bunch of roses for the price of 3 Louis, and used 5% as the interest rate to calculate the principal and interest. However, the calculations surprised them. Every year, a bunch of roses 3 Louis, the interest rate is 5%, and the 187-year-old profit is as high as 1,375,596 francs. In the face of huge indemnities, the French government had to openly apologize sincerely and promised that the storm would end. However, under the influence of time, the value-added of funds is effective and the power is enormous.

Case 2, the money placed under the bed. Put a sum of money under the bed, 1 month, 1 year, 10 years, his value will not change, not only will not become more, will depreciate with the rise of prices, but also the risk of corrosion, loss .

2). Case selection applied to life.

Selecting the time value of life closely linked to the case, so that students understand that the time value of funds is not Abstract theoretical knowledge, there are specific application scenarios, and life is very close.

Case 1, mortgage, mortgage is a typical example of the practical application of capital time value. The repayment method of mortgage has the equal principal method and the fixed annuity method. These two repayment methods are relatively large in borrowing amount, and the borrowing time is relatively common. In the case of repayment, the difference between the principal and the loan is large, and the most important reason is the influence of the time value of funds. For example, a loan with a loan of 500,000 and a loan term of 10 years is used as an example. The interest rate is 5%. The amount of repayment of the equal principal method and the equivalent annuity law is as follows: 1. The equal annuity method, the monthly repayment amount is 5303.28 yuan, and the ten-year repayment is Profit totaled 636,393.09 yuan, from the first period to the last period, the repayment period 1, 2, 3...118, 119, 120, the principal of the repayment amount is 321.9.93, 3233.36, 3246.83...5237.53, 5529.36, 5281.27, the interest in the monthly repayment amount is 2083.33, 2069.92, 2056.44...65.74, 43.9222.01, the principal is increasing, the interest is decremented; the equal principal method is repaying the principal amount of 4166.67 yuan per month, monthly. The repayment of interest is declining, and the total repayment of 62,6042.77 yuan in 10 years is less than the equivalent of the annual amount of reimbursement of 10,350.32 yuan. The larger the amount, the longer the term, the more obvious the effect, and the time value of funds is the decisive factor.

Case 2, sales. Regular promotional methods such as discounts, coupons, and full reductions can't evoke a consumer's desire to buy. Instead of a different promotion, you may receive unexpected results. The flexible use of capital time value is a very good method. The process is as follows: In the 1990s, the US auto market was already saturated, and the sales of new cars became extremely difficult. Everyone did not hesitate to spend money, cut prices, give gifts, and so on. One of the cars, priced at 10,000 US dollars, from a few percent to 15% discount, sales are very poor, when a financier

came up with a different promotional means, no discount, buy one send First, buy a car, don't discount but send a \$10,000 US\$ 30-year US Treasury bond. The huge temptation finally attracts consumers and the promotion is successful. However, the seller is really successful because the consumer does not get cash, it is a US Treasury bond that expires after 30 years. Using the present value of the annuity, the discounted government bond that expires in the next 30 years is only 994 US dollars, that is, the seller makes a profit of 994 US dollars, and the 9.94% discount is 9.94%, far lower than the initial 15% discount.

3). Case application in professional course learning

In financial accounting, the purchase of fixed assets or financing leased fixed assets, payment by installment payment, there is a time difference, the time difference will naturally produce a value difference, the so-called financing costs are essentially the time value of funds.

4). Funding case application at work

The typical case of capital time value in work is the investment and financing decision of the project. It is usually measured with dynamic indicators. The time value of funds is the core element of the dynamic indicator. The investment recovery period, net present value, internal rate of return, profitability The index must be based on time value as a basis for calculation and a basic skill that project investors must master.

In the process of starting a business, from the initial stage of entrepreneurship to the success of entrepreneurship, the value of capital time runs through. Initial financing, investment, and estimated current value of investment returns are all time value considerations.

5. Other aspects of teaching research

5.1 Class schedule

The teaching time is 12 hours, and it must be combined online and offline. Combine the micro-courses and study repeatedly before and after class, gradually understand the meaning of the time value of funds, understand its importance in work, study and life, and master The calculation of the corresponding indicator.

5.2 Using Excel's modern information means

The financial management and management accounting textbooks are attached with the annuity type coefficients for inquiry, but the schedule has two limitations. One is that the coefficient Table provided by the schedule is an integer, but in practice, the interest rate is often not an integer, which gives Coefficient query brings great inconvenience. Another limitation is that time (n) and interest rate (%) have certain limits. Loans and wealth management are often in the range of tens to more than 100. It is impossible to use the coefficient Table to query. Of course, it can be calculated by a multi-function calculator. However, the speed is slow and the accuracy is poor. Using Excel's powerful function, when calculating PMT, PPMT, IPMT and other indicators, input the corresponding index value, the result is one-click generation, fast and accurate, and also reduces the confusion of students, killing two birds with one stone.

5.3 Effective use of ARCS motivation model

Effectively use the ARCS motivation model, and successfully introduce it into the teaching of capital time value, and make detailed planning in the four motivational factors of attention, relevance, confidence and satisfaction. It is a knowledge point, and the ARCS mode can be designed simply.

The capital time has endless charm. Through teaching methods, teaching methods, content design, case selection, etc., it can not only reduce the difficulty, but also stimulate students' interest in learning. The teaching is relatively easy, and the students benefit greatly. Learning knowledge makes rational decisions, such professional learning has greater radiation, and is a professional teaching and teaching in the true sense.

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