

Critique on mm theory assignment

[Art & Culture](#)



**ASSIGN
BUSTER**

American economist Franco Modigliani and Merton H. Miller published *The Cost of Capital, Corporation Finance and the Theory of Investment* (Hereafter MM theory); a paper presented the initial MM theory, which states that under a certain market price process, in the absence of taxes, bankruptcy costs, and asymmetric information, and in an efficient market, the value of a firm is unaffected by how that firm is financed. It does not matter if the firm's capital is raised by issuing stock or selling debt.

It does not matter what the firm's dividend policy is (Modigliani and Miller 1958). The basic assumptions of MM theory are: 1. The company only has the long-term bonds and common stocks, both bonds and stock trade in the complete capital market with no transaction cost; 2. The individual investors and corporate investors could gain the same interest rate with no liability risk; 3. The companies with similar operating conditions have the same business risks; 4. Investors hold the same expectations on the average business profit in future; 5.

All cash flows are perpetual annuities, including EBIT (Earnings before interest and tax) etc, that is, the growth rate of the enterprise is zero (Modigliani and Miller 1958). The development of MM theory mostly experienced three stages: 1. No-tax model. The first MM model takes no account of corporate taxations; 2. Corporate tax model. Modigliani and Miller (1963) published *Corporate Income Taxes and the Cost of Capital: A Correction*, which loosened its initial assumptions, introduced corporate tax into MM theory (Modigliani and Miller 1963); 3.

Miller model. Merton H. Miller (1976) proposed to consider corporate tax and individual tax in estimating how the debt leverage impacts the value of firm (Miller 1977). During the past 50-year, MM theory has made tremendous academic achievements for western companies in exploring the optimal capital structure and reducing capital costs etc. Firstly, it provides a research frame of reference and theoretical basis. Since that, most of the capital theories are base on MM theory, such as Pecking-order Theory, Trade-off Theory, and Agency Theory etc.

Secondly, MM theory makes the capital structure theories systematic and builds a framework for the development of capital structure theories.

Secondly, MM theory makes the capital structure theory systematically, as there was not a system of traditional capital structure theory. Last, but not least, it is only a general description of the traditional capital structure theory. While MM theory uses modern analytical methods, such as partial equilibrium, mathematical analysis etc, therefore, it makes MM theory become reliable. Despite tremendous achievements, there are still limitations in MM theory.

First, the assumptions are too harsh, and most of them cannot be achieved in reality. To illustrate, MM theory assumes that individuals and corporations could borrow at the same interest rate, and can be substitutive, but, in fact, the individual borrowers pay more than what corporations do, as well as bear a higher risk. Furthermore, MM theory also assumes there is no transaction cost, which extremely differs from the real transaction process. Second, the assumptions are beyond the reality, although the logic derivation is correct, the conclusions still differs.

<https://assignbuster.com/critique-on-mm-theory-assignment/>

Both corporate tax model and Miller model suppose that corporation should raise the liability as much as possible in order to maximise the value of the firm, in extremity, up to 100% liability. However, none of enterprises adopt this point. Third, MM theory stands at a static perspective, and does not consider the external economic environment and the impact on capital structure by changing enterprise's production and operating conditions. In fact, many factors, which affect the capital structures, are variable.

For example, companies should cut down their liabilities appropriately in order to reduce business risks, when the socio-economic experiences a recession. According to MM theory, the value of tax saving is associated with the corporate income tax rate. That is, the higher corporate income tax rate, the more tax deductible the corporation could achieve from financing by liability. In other words, corporations are inclined to finance by liabilities rather than equity financing in relative higher corporate income tax rate countries, and vice versa.

Under the actual situation in China, the corporate income tax is much higher than other countries in the world; corporations should prefer financing from debt theoretically (Huang and Zhang 2007). However, actually, the capital structure of Chinese enterprises runs counter to the MM theory and other capital structure theories. The proportion of liability financing in China is far less than the proportion of equity financing (Huang and Song 2006). First of all, there is merely no mechanism in applying MM theory.

In accordance with the MM theory, both individual and institutional investors can process arbitrage actions freely in the capital markets. In western well-

developed capital markets, there is a wide range of fund-raising channels and other financing options, the arbitrage mechanisms usually affect the markets. However, at present, the market mechanism is not fully developed in China, as well as capital market is under-developed. Thus, these limit the financing options and forms; make it difficult to carry out arbitrage activities. Generally, MM theory cannot be applied.

Secondly, the tax-saving of MM theory affects gently in China. As the taxations are mainly coming from turnover tax in China, and 80% of the tax is from value-added tax, consumption tax etc, while the income tax only accounts for 20% of the tax revenue. Compared with western countries, the income tax is accounted for 80% of the tax revenue. As consequence, the benefits from tax-saving produce little effect. Finally, MM theory is based on the western complete financial markets, as companies are free to choose a variety of funding sources from the capital market, and all the investors are free to choose their own investments.

However, the capital market is not yet perfect in China, bond financing is subject to strictly control and, therefore, the theoretical framework of MM theory cannot be applied perfectly in China. To sum up, MM theory does make great academic achievements to modern capital structure research, and it provides a systematic framework for later development. However, the assumptions of MM theory are over-theoretical, which cannot be obtainable in actual world. Thus, it needs to consider other variables in factual analysis. ? References Huang, G. and F. M. Song (2006). " The Determinants of Capital Structure: Evidence from China. China Economic Review 17(1): 23. Huang, S. and G. Zhang (2007). " The Analysis of Financing Preference <https://assignbuster.com/critique-on-mm-theory-assignment/>

on China's Listed Companies. " Economic Research Journal 42(472): 12.

Miller, M. H. (1977). " Debt and Taxes " presidential address delivered at the annual meeting of the American Finance Association, September 17, 1976.

Journal of Finance. Modigliani, F. and M. H. Miller (1958). " The Cost of Capital, Corporation Finance and the Theory of Investment " The American Economic Review 48(3): 38. Modigliani, F. and M. H. Miller (1963). "

Corporate Income Taxes and the Cost of Capital: A Correction. " The American Economic Review 53(3): 11.