GE2260 Introduction to Finance
Group Project
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Question 1:
(a)

	Average monthly returns	Standard deviation of returns
Ping An Insurance	0,018855022	0,093637356
Kweichow Moutai	0,026984118	0,08834704
Beijing Originwater Technology	0,007664215	0,113348729
CITIC Securities	0,018241	0,147961
Inner Mongolia Yili Industrial Group	0,022080946	0,090955556
Industrial and Commercial Bank of China	0,0090792	0,05642674
China Yangtze Power	0,021148	0,059829
A-stock index	0,00876	0,06796

(b)

	Average monthly excess returns	Standard deviation of excess returns
Ping An Insurance	0,015766	0,09357
Kweichow Moutai	0,023895409	0,088424772
Beijing Originwater Technology	0,004575505	0,113297681
CITIC Securities	0,015152538	0,147912429
Inner Mongolia Yili Industrial Group	0,018992	0,090907
Industrial and Commercial Bank of China	0,00599	0,056378

China Yangtze Power	0,01805928	0,059820043
A-stock index	0,005668	0,067883

(c)

	alpha	beta
Ping An Insurance	0,010410	0,945035063
Kweichow Moutai	0,020370	0,621974284
Beijing Originwater Technology	-0,000394	0,876733138
CITIC Securities	0,006409	1,542508
Inner Mongolia Yili Industrial Group	0,014857	0,729509788
Industrial and Commercial Bank of China	0,003417	0,45403834
China Yangtze Power	0,016068	0,3513782

Question 2:

(a)

a)				0	1	0	0	0	0	0		
Stock	Mean Excess Return	Weight		Ping An Insurar	Kweichow Mc	Beijing Orig	CITIC Secu	Inner Mor	Industrial a	China Yangtze Power	alpha	beta
Ping An Insurance	0,015766312	0		0,008755432	0,00414661	0,0024201	0,011448	0,00385	0,003563	0,002378	0,010410	0, 945035
Kweichow Moutai	0,023895409	1		0,004146607	0,00781894	0,001602	0,004345	0,003	0,00206	0,001633	0,020370	0, 621974
Beijing Originwater Technology	0,004575505	0		0,002420132	0,00160195	0,0128364	0,005411	0,00311	0,000782	0,000809	-0,000394	0, 876733
CITIC Securities	0,015152538	0		0,011447924	0,00434478	0,0054112	0,021878	0,00534	0,005306	0,003375	0,006409	1, 542508
Inner Mongolia Yili Industrial Group	0,018992237	0		0,003847989	0,00299683	0,0031117	0,00534	0,00826	0,00193	0,001627	0,014857	0, 014857
Industrial and Commercial Bank of China	0,005990495	0		0,00356319	0,00206029	0,000782	0,005306	0,00193	0,003178	0,001429	0,003417	0, 454038
China Yangtze Power	0,01805928	0		0,00237812	0,00163274	0,0008094	0,003375	0,00163	0,001429	0,003578	0,016068	0, 351378
	Sum of Weights	1		0	0,00781894	0	0	0	0	0		
	Mean Excess return of	0,023895409	alpha of ptf	0,02037								
	Std dev	0,088424772	beta of ptf	0,62197428								
	Sharpe Ratio	0,270234325										

(b

b)			0,0000	0,29570273	0	0	0,12961	0	0,574689		
Stock	Mean Return	Weight	Ping An Insurar	Kweichow Mc	Beijing Orig	CITIC Secu	Inner Mor	Industrial a	China Yangtze Power	alpha	beta
Ping An Insurance	0,015766312	0	0,008755432	0,00414661	0,0024201	0,011448	0,00385	0,003563	0,002378	0,010410	0,945035
Kweichow Moutai	0,023895409	0,295702733	0,004146607	0,00781894	0,001602	0,004345	0,003	0,00206	0,001633	0,020370	0,621974
Beijing Originwater Technology	0,004575505	0	0,002420132	0,00160195	0,0128364	0,005411	0,00311	0,000782	0,000809	-0,000394	0,876733
CITIC Securities	0,015152538	0	0,011447924	0,00434478	0,0054112	0,021878	0,00534	0,005306	0,003375	0,006409	1,542508
Inner Mongolia Yili Industrial Group	0,018992237	0,129608551	0,003847989	0,00299683	0,0031117	0,00534	0,00826	0,00193	0,001627	0,014857	0,014857
Industrial and Commercial Bank of China	0,005990495	0	0,00356319	0,00206029	0,000782	0,005306	0,00193	0,003178	0,001429	0,003417	0,454038
China Yangtze Power	0,01805928	0,574688716	0,00237812	0,00163274	0,0008094	0,003375	0,00163	0,001429	0,003578	0,016068	0,351378
	Sum of Weights	1	0	0,00107601	0	0	0,00037	0	0,00158		
	Mean return of ptf	0,019905958	alpha of ptf	0,01718299							
	Std dev	0,055057499	beta of ptf	0,38777822							
	Sharpe Ratio	0,361548535									

Question 3:

(i)

Kweichow Moutai, a renowned Chinese liquor company, is known for its iconic brand of Moutai liquor (Kweichow Moutai, 2018). The company's operations span the entire industrial chain of liquor production, encompassing upstream materials, mid-stream production, and downstream channels. Upstream materials involve sourcing essential ingredients such as sorghum, wheat, water, packaging materials, and production equipment. Mid-stream production includes various types of Moutai liquor, ranging from high-grade to low-grade, as well as special editions like New Year Moutai and Prince Moutai. Lastly, downstream channels encompass distribution through specialty stores and e-commerce, forming a vital part of Moutai's industrial chain. Investing in Kweichow Moutai is a strategic decision based on several key factors. This analysis essay will delve deeper into factors for and against investing in this company.

According to the information in the Assignment Data, the mean excess returns from Kweichow Moutai from 10.2012 to 06.2020 is 2.4%, and the alpha is 2.037%, which means the Kweichow Moutai's expected return could be higher than the required return. Also, the beta is 0.6272, demonstrating that investing in this company is less risky. Qian (2021) states that the solvency analysis of the company reveals its strong long-term solvency, as reflected by a consistently low asset-liability ratio compared to the industry average. The fundamental analysis of Moutai's financial statements and operating indicators demonstrates the company's positive performance and growth potential (Qian, 2021). With increasing sales volume, total revenue, and a continuous improvement in corporate image and market share, Moutai shows promising prospects for long-term investment. Moreover, the shape of the data analysis reveals that Moutai's stock has a solid positive trend line and a weak negative trend line, indicating effective support levels and potential for price increases. This further supports the investment potential of Moutai, as the stock is expected to rise in the short term (Qian, 2021).

Considering the nature of the product, a high-alcohol content drink may raise concerns about potential regulatory intervention in the production regarding health issues. Legal issues have also been surrounding the company, including false advertising claims

(Asia Times, 2020) and bribery allegations against its former chairman (CNN, 2021). These litigation risks could raise concerns about the company's corporate governance and ethical practices, which may negatively impact its reputation and financial performance. According to Xinyue and Shen (2020), the company has faced action lawsuits from shareholders because of the misuse of financial resources, such as spending over $122.5 million in donations. That shows the company's agency problems leading to potential high agency costs for the company and it is shareholders.

Summing up, based on historical data, Kweichow Moutai Co has shown strong financial performance in terms of stock price trend, high expected return, and low risks. However, other factors should be considered, such as litigation risks and agency problems between its managers and stockholders.

References

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    Kweichow Moutai sued over 'false advertising'. (2020, February). Asia Times. https://asiatimes.com/2019/06/lawyer-sues-distiller-for-false-advertising/

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XINYUE, S., & SHEN, T. (2020, December). Moutai shareholders to sue distiller for $120m government donations. Nikkei Asia. https://asia.nikkei.com/Spotlight/Caixin/Moutai-shareholders-to-sue-distiller-for-120m-government-donations

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(ii)
ROE = (NI1/EQ0) = 52 460 144/ 161,322,735 = 32.52%
ROA = (NI1/TA0) = 52 460 144/213 395 811 = 24.58%
Numbers above have been retrieved from Kweichow Moutai Co., Ltd. (600519.SS) Balance Sheet - Yahoo Finance

(iii)
Debt-to-equity-ratio = Total Liabilities/Total Shareholders' Equity = 400,786/189,539,369=0.211% (**The Company has a very low leverage**)
Numbers above have been retrieved from Kweichow Moutai Co., Ltd. (600519.SS) Balance Sheet - Yahoo Finance (Data for 2021).

Question 4

China, the world's second-largest economy and largest exporter, has emerged as a global economic powerhouse. Its market presents unique characteristics, key drivers, and evolving trends that shape its business landscape. This essay will overview China's market, exploring its economic reforms, the e-commerce revolution, and implications for domestic and international businesses. Through this overview, factors for and increasing the fund's asset weight in the China market will be discussed.

China's stock market has undergone significant changes, transitioning from a decentralized to a centralized system, resulting in increased organization and growth in the number of listed companies ("China A-shares:", 2023). This has created opportunities for investors to tap into a broader set of Chinese companies, particularly in fast-growing sectors like IT, healthcare, and consumer industries. Additionally, while China's A-share market is dominated by retail investors who tend to have shorter holding periods, which can contribute to market volatility, it also presents an opportunity for active investors to take advantage of low levels of research coverage and correlation compared to overseas markets (Li, Y., 2021). Moreover, with ongoing regulatory measures, increased transparency, and privatization of state-owned enterprises, China's market is evolving and becoming more attractive to foreign investors. Lastly, the inclusion of A-shares in global indices is expected to drive increased investor flows, making China A-shares a valuable addition to China's multi-asset strategies, offering diversification benefits and a wide opportunity set (Li, Y., 2021). Overall, investing in China's market can provide unique opportunities for investors seeking exposure to one of the world's fastest-growing economies with evolving market dynamics.

Nevertheless, there are issues with applying funds raised on the Growth Enterprise Market (GEM). A significant portion of funds is not used for the company's main business but is diverted to other purposes such as bank funds, working capital, and housing purchases. There have also been financial fraud cases in China's stock market, with companies falsifying financial data and misappropriating funds (Tan, H. (2021)). This lack of clarity and misuse of funds can impact the company's performance and stock price, resulting in investors' losses and undermining trust in the market.

Overall, China's delisting mechanism could be better, with concerns about its operation efficiency and execution. This can lead to prolonged periods of stock market stagnation and the need for further reforms to improve the overall functioning of the market.

References:

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