COLLECTIVE INVESTMENT INSTITUTIONS

Topic 4 – Portfolio Construction & Wealth Management Assignment

Assignment Requirements

Your summary should be clear, professional, and structured for a real client.

1. Client Risk Assessment
• Explain what it means to be a moderately risk-averse investor.
• Discuss how investment horizon and liquidity needs affect the portfolio structure.

2. Strategic Asset Allocation
• Allocate Carolina's €250,000 across major asset classes.
• Present allocation in a table (% + €).
• Justify the allocation in terms of risk, return, and diversification.

3. Investment Selection
• Select 5–7 UCITS ETFs or other UCITS-compliant collective investment funds that match the target allocation.
• Present in a table with name and hyperlink, ticker, costs & fees, asset type, region, currency and justification for inclusion in Carolina's portfolio.

4. Risk & Return Analysis
• Explain expected sources of portfolio return.
• Identify key risks and how the portfolio moderates them.
• Discuss inflation and interest-rate considerations.

5. Scenario Response
• If global stock markets fall 15% next year, what should Carolina do?
• Explain the rationale in terms of investor behavior and long-term discipline.

Grading Criteria (*15% of course grade for Collective Investment Institutions*)

• Clarity, quality and correctness of reasoning and justifications
• Suitability of allocation for a moderate risk profile
• Appropriateness and diversification of fund/ETF selection

• Note: your assignments are subject to evaluation by Turnitin

Client Case: Carolina Duarte

You are a junior wealth advisor at a financial planning firm in Madrid. A new client, Carolina Duarte, age 42, has scheduled a consultation with you to develop an investment strategy.
Carolina has recently received an inheritance and wishes to invest for her long-term future. She has limited investment knowledge but is financially responsible and wants guidance.

Client Profile Summary

• Age: 42
• Residence: Spain
• Investment Amount: €250,000 (lump sum)
• Investment Horizon: 10 years or more
• Employment: Stable income, no immediate need for withdrawals
• Other Assets: Carolina owns her home, which is in excellent condition, no mortgage outstanding
• Liquidity Requirement: At least €15,000 accessible at all times (cash or near cash)
• Risk Tolerance: Moderately risk-averse
• Preferences: Prefers diversified funds or UCITS ETFs rather than stock or bond picking
• Key Concerns: Market volatility, rising interest rates, inflation, safety, capital preservation

Your task is to propose an investment strategy that balances growth and capital protection, while addressing the client's stated concerns and liquidity needs.

Case Responses:

1. Personalized Client Risk Assessment for Carolina Duarte.

- Explain what it means to be a moderately risk-averse investor.
- Discuss how investment horizon and liquidity needs affect the portfolio structure.

1.1

This type of investor is willing to assume some kind of losses; on the other hand he expects to obtain higher returns. Usually, this type of investor will combine fixed and variable income. We think that with our strategy we can protect the investor from big losses by rebalancing the whole portfolio, while also allowing him to achieve higher returns.

1.2

With a 10-year time horizon, we can afford greater exposure to equities, since the longer the investment horizon, the greater the potential for returns. Given this time horizon, we believe that for fixed income, we should consider products with a duration of less than 10 years to avoid price fluctuations.

According to the demands of the client needs, we need to keep 15.000 $ liquid. This will affect our strategy in the asset allocation, because we are forced to invest only 94% of the capital.

2. Asset Allocation for Carolina Duarte.

Strategic Asset Allocation

Asset Class	Proposed Allocation		Justification (risk, return, diversification, etc.)
	%	€	
Interest bearing account/High yield savings account	6%	15.000	B100 Account(ABANCA): We have done researched in the Spanish interest bearing account market and we have decided to chose the " Cuenta health B100 de ABANCA" because it offers a 3.20 TAE and the possibility to withdraw the money whenever whe need.
Crypto Funds	3%	4125	We believe having exposure to crypto environment is beneficial to the client because in our opinion this will keep innovating without risking a big amount for the portfolio.
Commodities Funds	10%	6875	We believe that having exposure to commodities is essential to diversify and to moderate inflation risk.
Equity Funds	37%	187.500	We consider to invest in equities to maximize the return of the portfolio considering that the economy in the future.
Private Equity Funds	10%	25.000	We consider to have exposure to private equity funds due to the return of Private equity funds. This return is one of the highest return without too much risk beating the famouses index , although is not very liquid.
Fixed Income Funds	34%	85.000	We consider to have exposure to this funds to diversify between assets and reduce risk and match the client's needs

3. Investment Selection for Carolina Duarte.

Asset Class	Name & Link	Ticker/ID	Costs & Fees	Region	Currency	Proposed Allocation %	Justification
Interest bearing account/High yield savings account	B100 Account(ABANCA): We have done researched in the Spanish interest bearing account market and we have decided to chose the " Cuenta health B100 de ABANCA" because it offers a 3.20 TAE and the possibility to withdraw the money whenever whe need.	B100	O fees and costs	Spain	Euros	6%	According to client needs , he needs 15.000 cash and this account will provide a fairly good return.
ETF	Schwab Us dividend equity ETF	SCHD	0,06%	EEUU	USD	11,1%	With a yield of 3.78% , we consider this ETF due to the stability and diversification on the sectors and will provide us stable income.
ETF	Emerging markets	EIMI	O,18%	Emerging markets	USD	9,25%	We believe that emerging markets are undervalued and might outperform the S&P in the next decade. On the other hand, it will help us diversify our portfolio reducing the concentration risk.
ETF	iShares NASDAQ 100 UCITS ETF	NQSE	0,33%	EEUU	EUR	12,95%	We believe in the AI narrative and we choose to expose ourselves to the leader at the moment, even though China might take the lead , the US won't be far away. We chose a Fund that is currency hedged to protect ourselves from currency devaluation.
ETF	ABRDN Physical Precious Metals Basket Share ETF	GLTR	0,6%	Commodities	USD	10%	We believe in this fund's potential , not just as a defensive asset. One of our best performing assets due to the it's industrial usage.
ETF	Bitwise Physical Bitcoin ETF	BITB	0,2%	Crypto Worldwide	USD	3%	We believe that bitcoin will have a central role in the future economy. That's why we choose to have exposure to this asset.

ETF	Amunid MSCI CHINA TECH UCITS ETF EUR Acc	CC1	0,55%	China	EUR	3,7%	Due to the housing crisis that China has been suffering since 2020, we consider it is a great opportunity to buy Chinese equity before its recovering. We think that in a future China might take the lead and become the world's largest economy.
Private Equity Investment Fund	Crescenta Private Equity Growth Top Performers III, FCR	H ES0124902083	0%	Spain	EUR	10%	We believe that having exposure to Private equity is fundamental due to the client needs , historically has dobled the Stock Exchange return.
Fixed Income Fund	iShares $ Treasury Bond 7-10yr UCITS ETF	IBTM	0,07%	USA	USD	20%	We want exposure to the US treasury bonds because they are considered credit-risk free, and they are paying good yields now. This will help us diversify our risks.
Fixed Income Fund	iShares € Govt Bond 10-15yr UCITS ETF EUR (Dist)	IEGZ	0,15%	Ireland		10%	We want exposure to European bonds because they are considered safe, and this will help us diversify our risks.
Fixed Income fund	BlackRock Global Funds - Emerging Markets Bond Fund	MLEMA2E(Bloomberg)	Initial fee: 5% Comoission: 1,25%	Luxemburg	EUR	4%	We chose Emerging Markets bonds because even though they are riskier, they pay better coupons.

4. Risk and Return Analysis.

- Explain expected sources of portfolio return.
- Identify key risks and how the portfolio moderates them.
- Discuss inflation and interest-rate considerations.

The portfolio has multiple sources of return:

1. Dividends received from our equity etfs.

2. The price/valuation of the stocks that constitute our equity etfs goes up either because they improve their profits or because of growth expectations.

Key Risks of the portfolio:

1. Currency devaluation: Our portfolio moderates this risk by having some funds in euros, some funds in dollars, and some funds that are hedged. Being hedged from this risk means that the fund makes charge of this risk and covers you from it (Funds that are hedged usually have higher commissions)

2. Inflation risk: If our equity investments grow slower than inflation, we would be losing money. To moderate this risk, we invest in equities that are able to transfer the inflation/costs to the consumer. In addition, we have exposure to commodities and assets like gold, silver, or BTC that also protect us from this risk.

3. Liquidity Risk: To prevent this risk, we chose highly liquid funds and assets; this will make it cheaper to change funds or to withdraw the money from them.

4. Concentration Risk: To avoid concentration risk, we have built a highly diversified portfolio, both geographically and across sectors. We divide the geographic risk between the US, China, and Emerging Markets. On the other hand, we've chosen to be exposed to technology, finance, health, private equity.... multiple sectors.

5. Volatility risk: Our portfolio has a beta of 0,6% compared to the Sp500. This means that if the markets move 1%, our portfolio moves 0,6%. This is due to our strong diversification throughout different countries and types of assets.

6. Market risk: Our portfolio has a correlation of approximately 0,34%. This reduces the snowball effect in case the market drops.

7. Interest rate risk: we are geographically diversified reducing the interest rate risk.

1.3

We have strong assets that can beat inflation by transferring the costs to the consumer and strong defensive assets that outperform inflation. In addition, we receive stable income from the dividends from the ETFS so this will help us beating inflation

In relation to interest rates , the fixed income fund's managers, we rebalanced the bonds depending on the interest rates situation. We are not engaged to a single bond that can decrease its value over time. Moreover, we are geographically diversified reducing the interest rate risk.

5. Scenario Analysis.

• If global stock markets fall 15% next year, what should Carolina do?
• Explain the rationale in terms of investor behavior and long-term discipline.

1

With the cash received from the dividends(SCHD ETF) , we will cover our risk by buying puts of Nasdaq or SP500, so our portfolio will go down and the return will decrease but we will be balancing this selling our previously bought puts , only risking the premium that we have to pay to have the right to sell the puts. I the market keeps falling down we sell the puts , obtaining a profit and only paying the premium. We will tell Carolina not to withdraw the money , we would even tell her to consider investing even more to average the cost of the investments and to take advantage of the situation like a " Financial Black Friday"

2

In terms of investor behavior , we consolidated a portfolio for the client that she doesn't have to be worried for the long term. Based on the historically the probabilities are in our favor to increase the value of the portfolio. We believe that long-term discipline is crucial for the client's needs and we recommend to the client that not to withdraw any investment that we are confident about.

6 General Statistics of our Portfolio

Beta : 0,6

Sharpe Ratio: 0,42

Approximate volatility: 8%

Maximum drawndown: -20%

Total correlation: 0,34

Expected yield: 7% annually

10 year Montecarlo analysis:

Used yield: 6,4%

Volatility: 8%

Number of simulations: 100.000

Montecarlo results:

Pessimistic(5%): +7%(0,7% annually)

Base(50%): +85 %(8.5% annually)

Optimistic(95%): 150 %(15%annually)

Graphic Proposed allocation