EURONEXT PARIS REAL ESTATE FUTURES CONTRACT

CASE STUDIES

CASE STUDY 1: REMOVING PRICE RISK ON CAPITAL IN A PHYSICAL PORTFOLIO

July 2018: a real estate investment trust (*Société Civile de Placement Immobilier* or SCPI in French) decides to keep only the rental income element from its Paris residential market exposure of 20,000 m^2 (sqm) over the next three years.

In order to reduce its exposure to the market price, the SCPI decides to sell the equivalent of its portfolio in sqm on the Euronext PARISSQM futures market.
It therefore sells 20,000 lots of the PARISSQM futures contract, with a July 2021 expiry.

Data	
Last price of index PARISSQM (€/sqm)	**€9,400**
Price of futures contract on expiry July 2021 (€/sqm)	**€10,400**
Transaction cost (future)	**1% (*)**
Transaction cost (physical)	**8%**
Net rental income	**2%**

(*) estimated costs based on spreads and financial brokers' fees

	SCENARIO 1	SCENARIO 2	SCENARIO 3
PARISSQM index price – July 2021	€8,500	€9,400	€10,400
PARISSQM index evolution	- 9.57%	0.00%	10.64%
PHYSICAL EXPOSURE WITHOUT HEDGING			
Gross gain (€/sqm)	- €900	- €	€1,000
Rental income (€/sqm)	€564	€564	€564
Net gain (€/sqm)	**-€336**	**€564**	**€1,564**
Net gain (%)	**- 3.57%**	**6.00%**	**16.64%**
PHYSICAL EXPOSURE WITH HEDGING			
Gain futures portfolio	€1,900	€1,000	- €
Gross gain physical exposure + futures contract	€1,564	€1,564	€1,564
Net strategy implementation cost	-€104	-€104	-€104
Net gain (€/sqm)	**€1,460**	**€1,460**	**€1,460**
Net gain (%)	**15.53%**	**15.53%**	**15.53%**
Gain from hedging strategy	*19.11%*	*9.53%*	*-1.11%*

Comments:

- A futures contract is a **market hedging tool**.
- This product allows the protection of real assets investment portfolios.

CASE STUDY 2: CAPTURING ALPHA FROM A PHYSICAL PORTFOLIO

July 2018: a real estate fund wants to invest in a residential housing development located in the inner suburbs to benefit from the convergence between prices in the greater Paris metropolitan area ('Grand Paris') and inner-city Paris.

According to the latest views on the market, real estate prices in Paris and its suburbs may remain stable or even decrease by 10% over the next 3 years.

The fund decides to invest in the 'Grand Paris' area while protecting its portfolio from a market trend reversal through the sale of Euronext PARISSQM futures contracts.

Data	
Last price of index PARISSQM (€/sqm)	**€9,400**
Last average price for investment in 'Grand Paris' area	**€6,500**
Price of futures contract on expiry July 2021 (€/sqm)	**€9,900**
Transaction cost (future)	**1% (*)**
Transaction cost (physical)	**8%**
Net rental income	**3.5%**

(*) estimated costs based on spreads and financial brokers' fees

	SCENARIO 1	SCENARIO 2	SCENARIO 3
PARISSQM index price - July 2021	€8,500	€9,400	€10,400
PARISSQM index evolution	- 9.57%	0.00%	7.45 %
Last average price for investment in 'Grand Paris' area in July 2021	€6,189	€6,825	€7,468
Evolution of 'Grand Paris' investment	-4.79%	5.00%	14.89%
Outperformance investment 'Grand Paris' vs. Paris	**4.79%**	**5.00%**	**7.45%**
BUYING REAL ESTATE ASSETS IN THE 'GRAND PARIS' AREA			
Gross gain on physical portfolio (€/sqm)	- €311	€325	€968
Rental income (€/sqm)	€683	€683	€683
Cost of strategy implementation (€/sqm)	- €520	- €520	- €520
Net gain (€/sqm)	**- €149**	**€488**	**€1,131**
Net gain (%)	**-2.29%**	**7.50%**	**17.39%**
BETA HEDGING THROUGH THE SALE OF FUTURES CONTRACTS			
Gain futures contract (€/sqm)	€1,400	€500	-€200
Cost of strategy implementation (€/sqm)	-€99	-€99	-€99
Net gain net futures contract(€/sqm)	€1,301	€401	-€299
Net gain (€/sqm)	**€1,152**	**€899**	**€832**
Net gain (%)	**17.73%**	**13.67%**	**12.79%**
Gain from hedging strategy	*20.02%*	*6.17%*	*-4.60%*

Comments:

- Using the futures contract on the PARISSQM index allows a dynamic and flexible exposure to the real estate market.
- The use of futures contracts makes it possible to implement an investment strategy at low cost and very simply, whatever the evolution of the market price.

CASE STUDY 3: SYNTHETIC VS PHYSICAL EXPOSURE

July 2018: an investor wants to invest €10 million in the residential market, for a period of one year.

The investor does not have the human resources to manage such exposure and would like to be able to disinvest rapidly if opportunities on other asset classes arise.

The investor decides to implement its strategy through the use of futures contracts instead of buying real assets.

Data	
Last price of index PARISSQM (€/sqm)	**€9,400**
Price of futures contract on expiry July 2019 (€/sqm)	**€9,800**
Transaction cost (future)	**1% (*)**
Transaction cost (physical)	**8%**
Net rental income	**2%**

(*) estimated costs based on spreads and financial brokers' fees

	SCENARIO 1	SCENARIO 2	SCENARIO 3
PARISSQM index price - July 2019	€9,000	€9,400	€9,900
PARISSQM index evolution	- 4.26%	0.00%	5.32%
PHYSICAL EXPOSURE			
Gross gain	- €400	- €	€500
Rental income	€188	€188	€188
Strategy implementation cost	- €752	- €752	- €752
Net gain (€/sqm)	**- €964**	**- €564**	**- €64**
Net gain (%)	**- 10.26%**	**- 6.00%**	**- 0.68%**
SYNTHETIC EXPOSURE			
Gross gain	- €800	- €400	€100
Cost of strategy implementation (€/sqm)	- €98	- €98	- €98
Net gain (€/sqm)	**- €898**	**- €498**	**€2**
Net gain (%)	**- 9.16%**	**- 5.08%**	**0.02%**
Gain (synthetic vs. physical)	*1.09%*	*0.92%*	*0.70%*
AVAILABLE LIQUIDITY	**€8,583,673**	**€8,991,837**	**€9,502,041**

Comments:

- Using the futures market allows the investor to put in place a strategy that, compared to a physical transaction, is:
  - **Less expensive:** around 1% compared to 8% for a physical investment;
  - **More dynamic:** futures contracts are liquid instruments which can be traded throughout the day (during market hours).
- This example shows that an investor can be exposed to more than 1,000 sqm in residential real estate while investing less than €1 million in capital.

CASE STUDY 4: LIGHTENING A BALANCE SHEET

- An insurance company would like to buy a real estate asset on the Paris residential market, with an expected high rental income.
- Its current estate exposure has reached capacity and this investment would lead to a funding appeal, according to the regulation (Solvency II Directive).
- As the timing is not right to proceed to an arbitrage in the physical portfolio, the company decides to sell futures contracts in order to reduce its global risk and to buy the desired real estate asset.

CASE STUDY 5: REDUCING REAL ESTATE RISK AT LOW COST

- An investment fund would like to allocate some of its residential real estate investments to the emerging equities market for a few months.
- Since the liquidity of the real estate assets is very limited, the fund decides to sell futures contracts on the PARISSQM index. This automatically reduces its market risk, allowing it to allocate the available risk capacity into the emerging equities market.
- The liquidity of the futures contract can enable this reallocation at low cost and within the day, whereas if the fund had to dispose of a part of its physical portfolio this would have taken several months and incurred high execution costs.

CASE STUDY 6: OPTIMISING CLIENTS' REAL ESTATE RISK

- The client of an independent financial advisor (in French, a *conseiller en gestion de patrimoine* or CGPI) would like to sell a 150sqm flat in Paris. The advisor and the client believe the market price is favourable for now, but that it is likely to deteriorate in the next 6 to 12 months.
- Given the nature of the asset and the relatively high price asked by the client, it is likely that the sale will take a few months.
- In order to protect the client against a price drop before the sale is complete, the advisor suggests that the client sells 150 futures contracts on the PARISSQM index in order to hedge against a possible market correction.

CASE STUDY 7: HEDGING FOR A HOUSING DEVELOPMENT PROGRAMME

- A developer will deliver a new 10,000 sqm housing development in the next 18 months and wishes to hedge his exposure against the uncertainty around the price evolution.
- He sells 50% of his property under development and fixes the prices for the remaining 50% by selling 5,000 futures contracts for the 2019 expiry, at a set price of €9,400.
- At expiry, the PARISSQM index price is €8,500: he buys back 5,000 futures contracts at €8,500 and realises a profit of €4.5 million (5,000 x €900)which compensates him for the sale of his assets at a lower price.

Could the future on the PARISSQM index help support your business strategy?

Contact Euronext to find out more:

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