

EXAM: Practical Fixed Income

1) For the following situations, what is the best trade?

➤ Consider the following bonds issue at the same date :

ASW OAT 2020 Euribor3m + 52

ASW OAT 2024 Euribor3m + 75

ASW OAT 2026 Euribor3m + 63

➤ Oil is rising by 2%, what will inflation swaps react? (Rise, lower, flatten...)

2) What is your country risk for 25M FRTR 2.75% 25/10/2027 and -50M DBR 3.75 4/01/34 (i.e. what happen if French govt rate increase by 0.01% and German govt rate move by 0.01%)

ISIN	DES	Clean Price	Freq	NOTIONAL
FR0011317783 Govt	FRTR 2 3/4 10/25/27	123.31	Annual	25m
FR0011708080 Govt	FRTR 1 05/25/19	113.82	Annual	40m
DE0001135226 Govt	DBR 4 3/4 07/04/34	148.09	Annual	-50m
DE0001135374 Govt	DBR 3 3/4 01/04/19	119.17	Annual	-50m

What is the yield for the FRTR 2.75% 25/10/2027 ?

3) What would be your hedge using the futures.

TITLE	PRICE	Yield	Conver.F	MAT	CPN
DBR 1 3/4 02/15/24	113.605	0.21	0.718587	15/02/2024	1.75
DBR 3 1/4 01/04/20	116.365	- 0.14	0.892621	04/01/2020	3.25
BKO 0 03/10/17	100.44	- 0.22	0.903128	10/03/2017	0

4) Using the following inflation swap rate :

1y eur inf @ 0.93	6y eur inf @ 1.11
2y eur inf @ 0.87	7y eur inf @ 1.19
3y eur inf @ 0.92	8y eur inf @ 1.26
4y eur inf @ 0.97	9y eur inf @ 1.315
5y eur inf @ 1.03	10y eur inf @ 1.37

Calculate the forward inflation rate 5y in 5y and 2y in 1y

- 5) What is the inflation risk on a 25y inflation swap @1.66 knowing that 25y discount factor is 0.139522
- 6) Knowing that historically, the Z-spread of the oatei20 is between [-22;50], what could you say about the inflation swap and the bond with an oatei20 Z-spread at 49 ?