J. SAFRA SARASIN
Sustainable Swiss Private Banking since 1841

Investment Product Guide-
Interest Rate Swap (IRS)

I have read the Investment Product Guide of the above product, and I acknowledge that I understand its features and risks.

Signature: _______________

Print Name: _______________

Date: ________________

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The Bank will provide Product Issuing Programme / Offering Memorandum / Pricing Supplement / Offering Circular / Base Prospectus.

Agenda

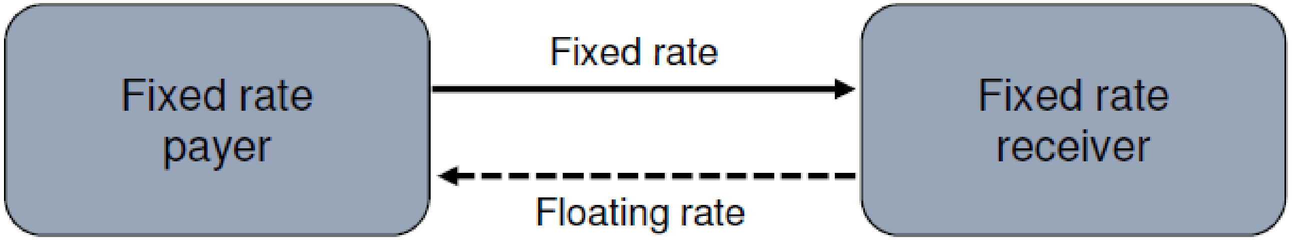
- Product Knowledge – IRS
  - Definition
  - Usage and Target Clients of IRS
  - Product Features
  - Benefits
  - Risk

What is interest rate swap?

- Interest rate swap is a contractual arrangement between two parties, a.k.a “counterparties”.
- The counterparties agree to exchange interest payments based on a defined principal amount, for a fixed period of time.
- IRS usually involved an exchange of “fixed interest rate” for a “floating interest rate” on a defined nominal amount

TYPE (Plain Vanilla):

- Fixed-To-Float
- Float-To-Fixed



Source: Bloomberg

What is interest rate swap?

- IRS mainly used for hedging against interest rate risks
- Increasingly used for speculation
- IRS are OTC instruments that the contract can be constructed to meet client specific requirement. The underlying parameters (ie, tenor, barometer) are agreed individually by the counterparties
- The principal amount is not actually exchanged, but rather only use for calculating the size of cash flows to be exchanged

- Common use of IRS:

1) Hedge fixed income positions against rising interest rates (asset swap)
2) Hedge floating-rate financing against rising interest rates (liability swap)

What is interest rate swap?

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- *Receiver:*
- Usually refer to counterparty “receive” fixed rate and PAY floating rate
- *Payer:*
- Usually refer to counterparty “pay” fixed rate and RECEIVE floating rate

- Floating interest rate is normally based on the standard reference rates used in interbank ie LIBOR or EURIBOR, and the reset frequency usually follow the interest rate index itself.

Target clients

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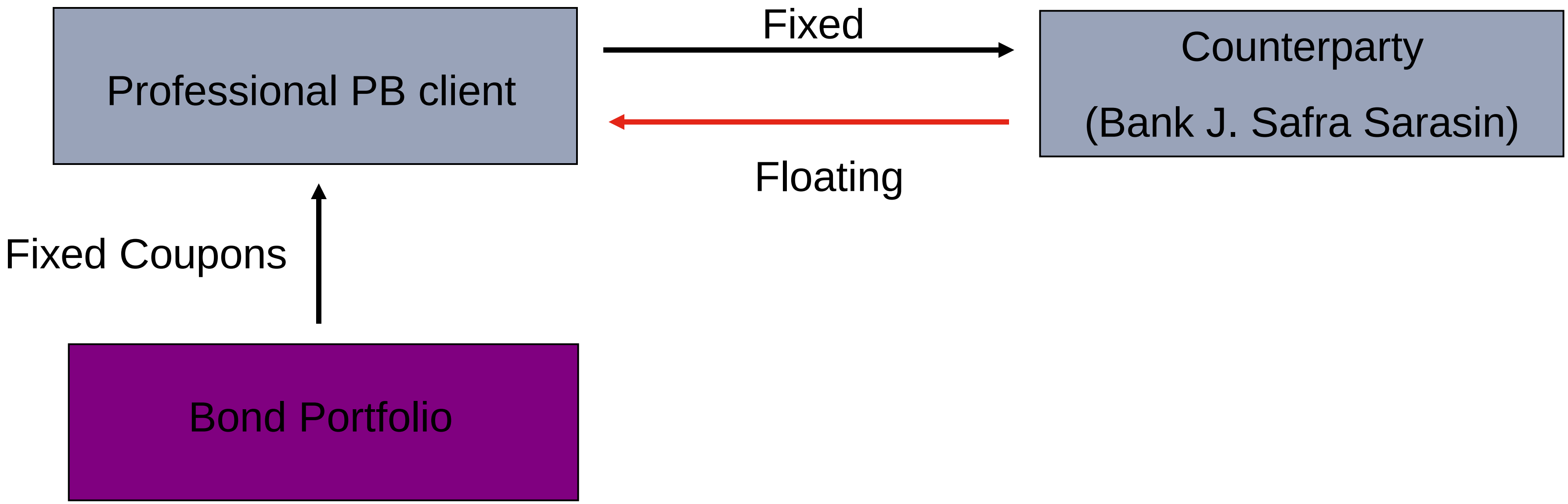
- Due to high minimum size requirement (normally USD5 million or equivalent), Interest rate swaps are usually for institutional clients or professional PB clients

Commonly used by:

- Commercial banks and insurance companies
- Corporate Treasuries and funding companies
- Asset managers, hedge funds and family offices
- Pension funds and real estate companies
- Professional private banking clients

Source: Bloomberg

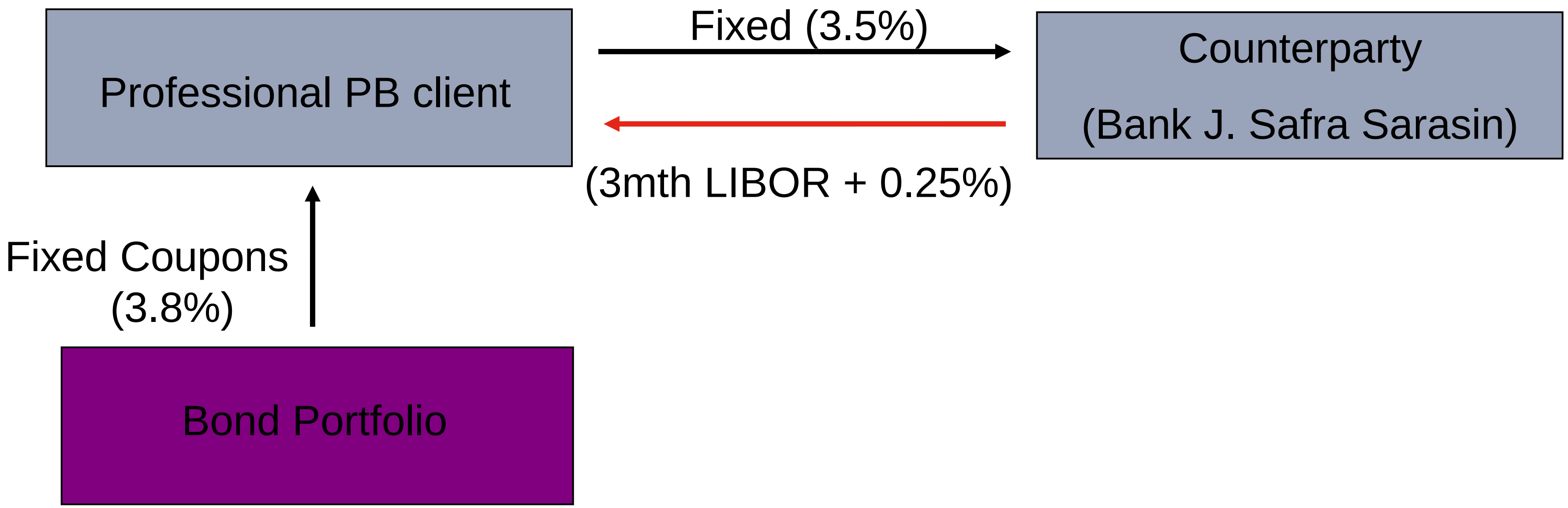
Interest rate swaps – assets side



- **Asset Swap**: Example showed a conversion of fixed rate investment for floating rate investment
- Use of IRS to hedge against rising interest rates. (The loss of value in the bond portfolio will be at least "partially" offset by the increased value of the IRS)

Source: Bloomberg

Interest rate swaps – assets side (example)



- **Asset Swap**: Client that receive fixed coupons can enter a “payer swap” (pay fixed FOR float) to hedge against potential rise in interest rate.
- In this case, client received 3.8% fixed coupon, pay 3.5% fixed rate for a floating rate of 3mth LIBOR + 0.25%

Source: Bloomberg

The above information is indicative only and does not represent the terms of any transaction.

Interest rate swaps – assets side

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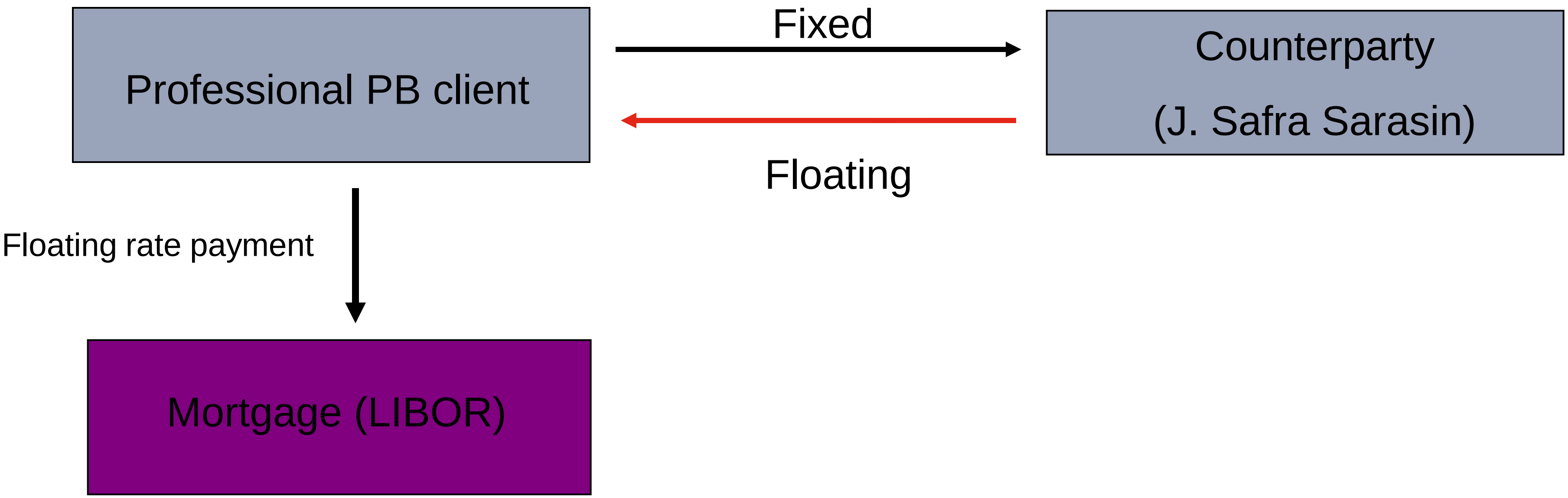
- However, A single overall interest rate swap may not be a perfect hedge for a bond portfolio given individual bonds will have different maturities

- *Micro-hedge:*
- Hedged the bond portfolio with separate interest rate swaps according to the characteristics of the respective bonds
- Maturity (ie group all bonds with similar maturities)
- Coupon (ie group all bonds with similar coupon)
- Nominal (ie group all bonds with similar nominal size)

Interest rate swaps – liabilities side



- **Liability Swap**: Example showed a conversion of floating rate loans into fixed rate payment
- In this case, client engaged in an IRS to pay predetermined fixed rate for a floating interest rate that match the mortgage payment (hedge against potential rise in interest rate)

Source: Bloomberg

Benefit of IRS

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- ***Liquidity***
- Swap markets are very liquid that can be easily cater for large ticket sizes, and usually quote in very tight bid-ask spread
- ***Transparency***
- Swap rates are published and easily to obtain through different channels (ie Bloomberg, Reuters) at an ongoing basis
- ***Flexibility***
- IRS can be tailor made to meet clients' specific requirement with regard to the nominal, start date, maturity, interest rate and use of index (LIBOR, EURIBOR)
- ***Efficiency***
- Hedge interest rate risks in an efficiently and cost effectively manner without changing the underlying positions (ie, sell bonds to change the duration)

Risk of IRS

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- ***Credit risk (counterparty risk)***
- Default of the counterparty in an IRS transaction
- ***Market risk***
- Interest rate trend move in opposite direction vis-à-vis to the client's IRS position
- ***Liquidity risk***
- Despite IRS is extremely liquid with price available even in times of market turbulence, price may only available in more conservative levels in the form of a wider bid-offer spread

Important note

- Interest rate swaps are offered in different major currencies with the terms of 2 to 10 years
- Clients must have signed and returned the new account opening document (AOD) and Credit Documents before any IRS transactions
- IRS contracts only available for Professional Investors (PI) / Accredited Investors (AI) ONLY
- Client must have an adequate credit limit
- Details of a transaction must be understood by all parties involved
- Margin for IRS is 5%
- Risk Level 5 (1 to 5, with 5 being the highest)

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