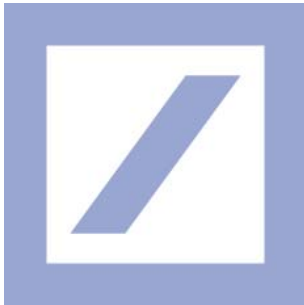




Retail FX – Overview, Implications & Discussion

ECB Foreign Exchange Contact Group

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1 Retail FX - Overview



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Definitions: Retail Investor & Retail FX

Retail Investor

A retail investor is an individual who buys and sells securities for their own behalf – not for an organization. Retail investors (non-professional investors) typically trade in much smaller quantities than institutional investors. Retail customers define the end of the distribution chain.

Retail FX

DB defines Retail FX as all sale of foreign exchange products or services directly to the private consumer.

Self-Directed Client

A self-directed client is an individual investor who uses his own decision making process.

Product Range

Retail products for retail investors can be grouped into:

Over-the-counter products

- Margin Trading
- Financial Betting

Securitized Products

- Flow Derivatives
- Structured FX Investment Products
- Hybrids

Product Range

Margin Trading

Margin trading means trading on a margin account. A margin account allows an investor to go long/short a currency against being short/long another currency by depositing a portion of the purchase price. By definition, margin trading is a leveraged investment.

Online Betting

Online betting is available in various forms. The most popular form is betting on exchange rates via digital options (One-Touch, No-Touch, Range Bets, etc.) Again, the main focus is on highly leveraged directional bets with clear and easy to understand payoff-profiles.

Product Range

Flow Derivatives

Today's FX retail market in (what DB now calls) **flow derivatives** originated from the exchange-traded warrant markets in continental Europe. Legislation and investor protection regulations allowed the financial industry to develop leveraged securitized products allowing retail investors to take directional views on exchange rate movements.

Flow derivatives are traded via exchanges or electronic single/multi-bank trading platforms (e.g. XOL, CATS-OS, etc.). Products are priced continuously (realtime) and can be traded automatically (unless a certain threshold is breached) via e-platforms.

Product Range

Flow Derivatives

Product offerings and new product development aim at

- (a) providing maximum leverage and/or
- (b) reproducing the pay-off profiles of all available over-the-counter foreign exchange instruments.

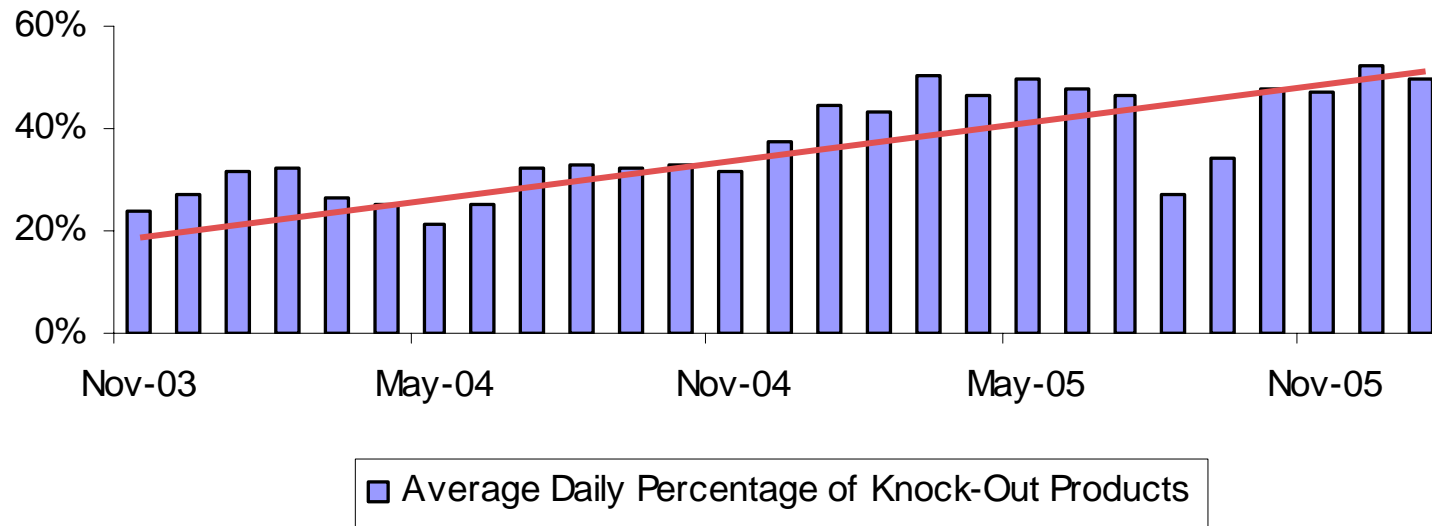
Currently, the most popular products are

- Vanilla options (Warrants)
- Barrier options (WAVEs)
- Leveraged synthetic spot positions (WAVE XXLs)
- Synthetic structured forwards (e.g. Bonus Certificates)

Product Range

Flow Derivatives – Leverage is Key

German Retail FX Knock-Out Products



Product Range

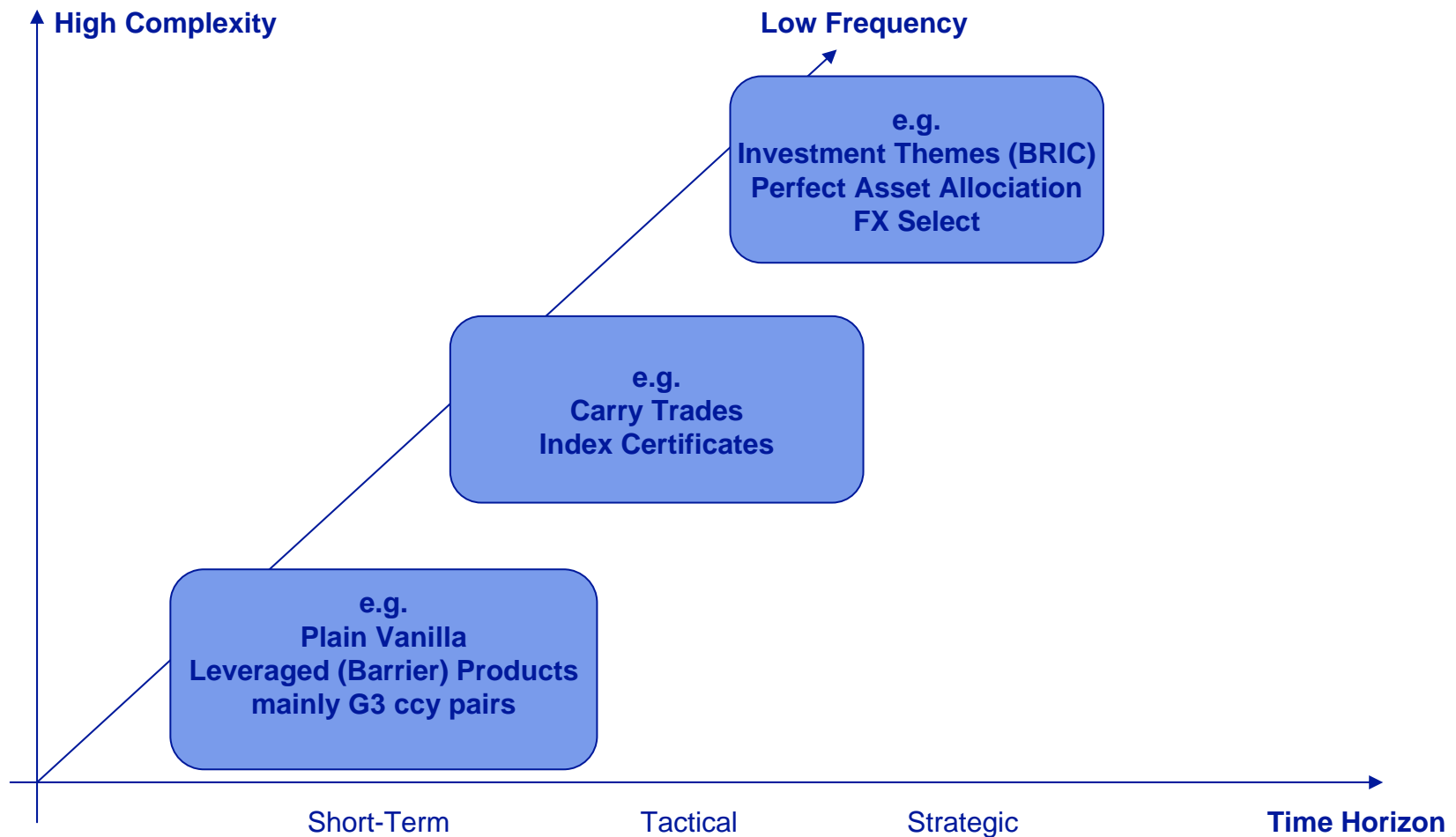
Structured FX Investment Products

The foreign exchange structured product universe for retail investors is huge. By now, nearly any pay-off profile can be created. Boundaries are only given by regulatory issues and cost considerations.

The trade rationale for a retail investor investing in structured FX is different from his investment approach in highly leveraged, directional products (flow derivatives). Structured FX investment products should allow retail investors to participate in returns from the asset class FX in the long run.

Classic examples in this category are structured products that invest in global foreign exchange, macro-economic themes (e.g. BRIC or EEMA currencies).

Product Range: Complexity | Frequency | Strategy - Mix

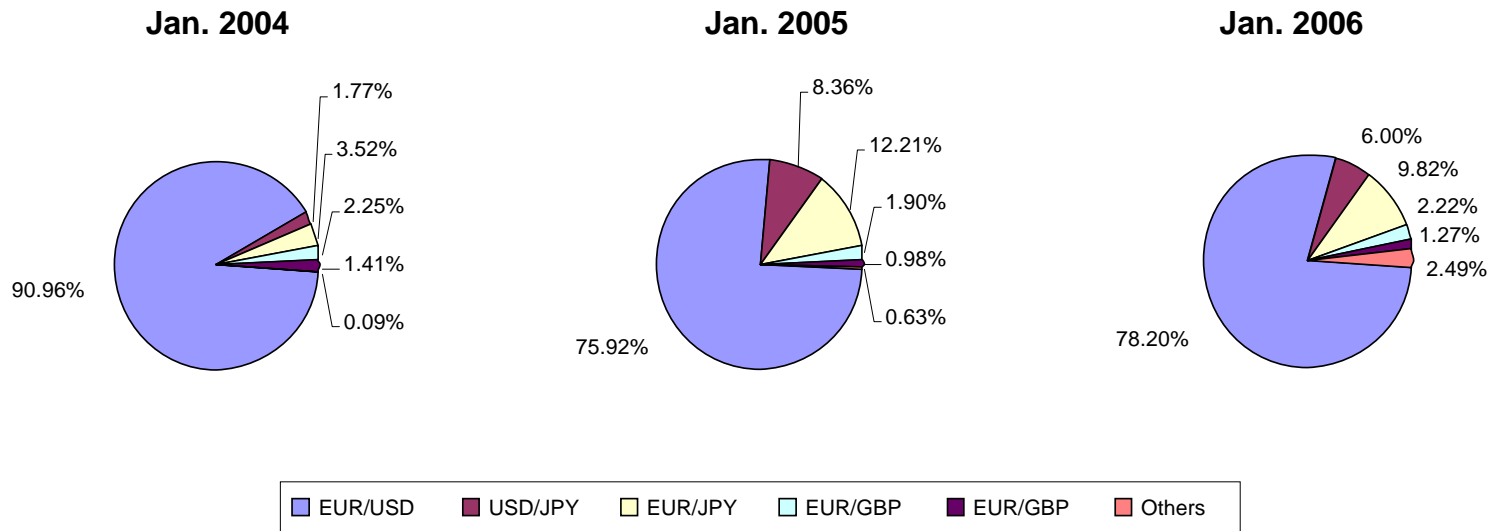


Currencies

Self-Directed Clients: G3 World

Self-directed clients who trade foreign exchange act in the most liquid and efficient markets available – even across asset classes, i.e. EUR/USD, EUR/JPY and USD/JPY

Average Daily Turnover in German Retail FX Products by Currency Pair



Currencies

Structured FX Investment Products: A wide range of themes

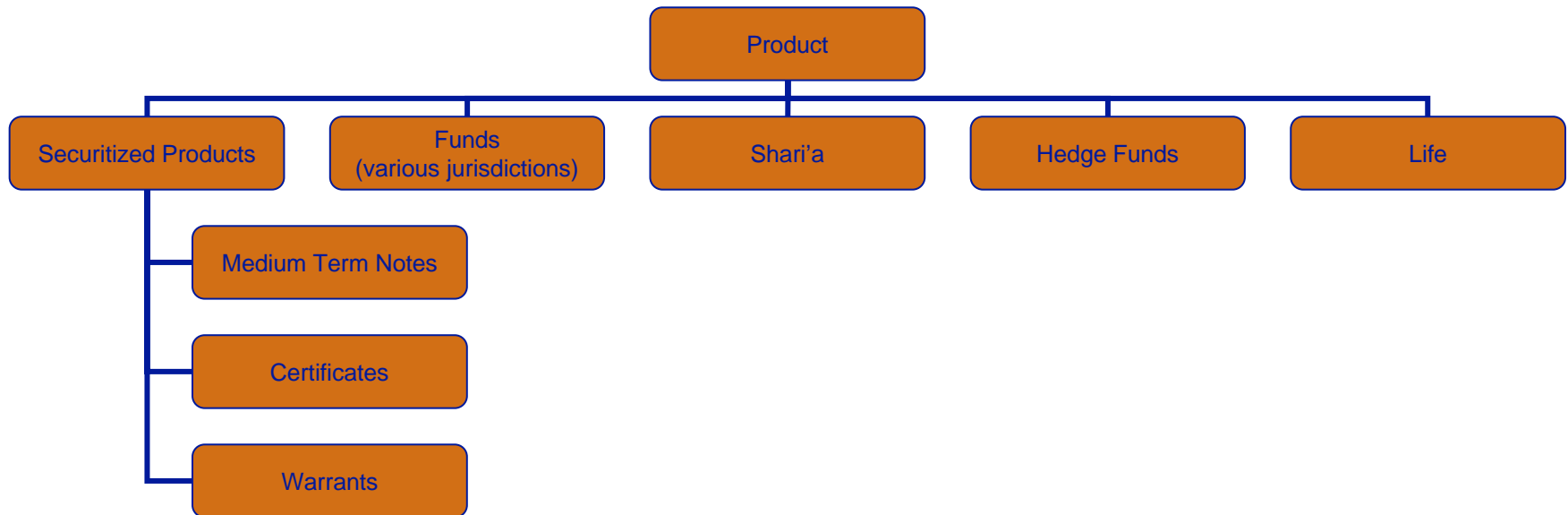
When retail distributors offer foreign exchange investment products to the private individual there is a wide range of currencies and investment themes available. Especially, carry trades, emerging markets (e.g. BRIC trades), index and basket products are becoming very popular.

Retail investors are basically willing to invest in any currency (exposure) as long as the investment story is promising and the risk-profile of the product matches their risk-appetite. They are not restricted and regulated in any form.

Wrappers

Retail Documentation

Retail products require special documentation due to private investor protection regulations. Banks are very innovative in creating „wrapping vehicles“ to allow private individuals to invest in all underlyings (including FX) as well as payout formulas.



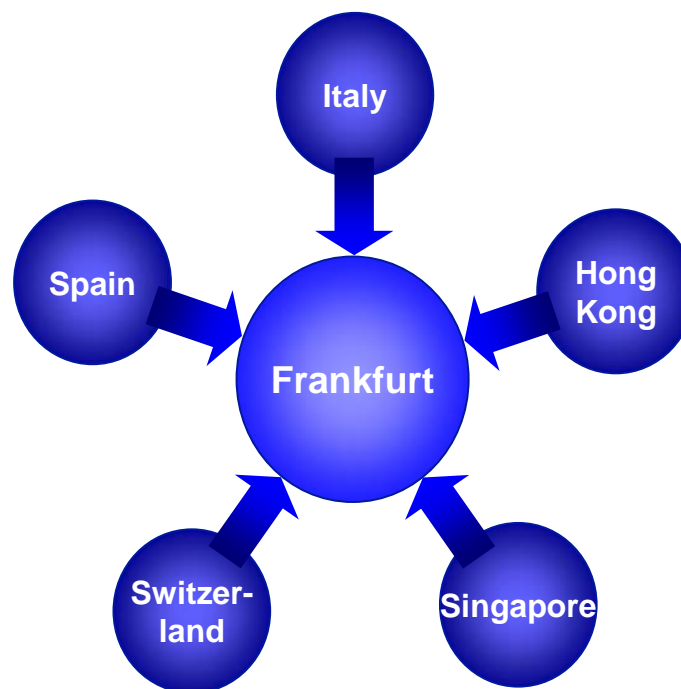
Global Market

Retail FX is a Global Business

Local retail markets developed their own market usances and regulatory framework independently from each other. Nevertheless, following the institutional business model we now see a globalization of the retail market, i.e. identical product offerings are available around the globe (if necessary adjusted to local regulations).

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Global Flow Derivative Strategy



2 Retail FX - Implications



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Disintermediation: The rise of the self-directed client!



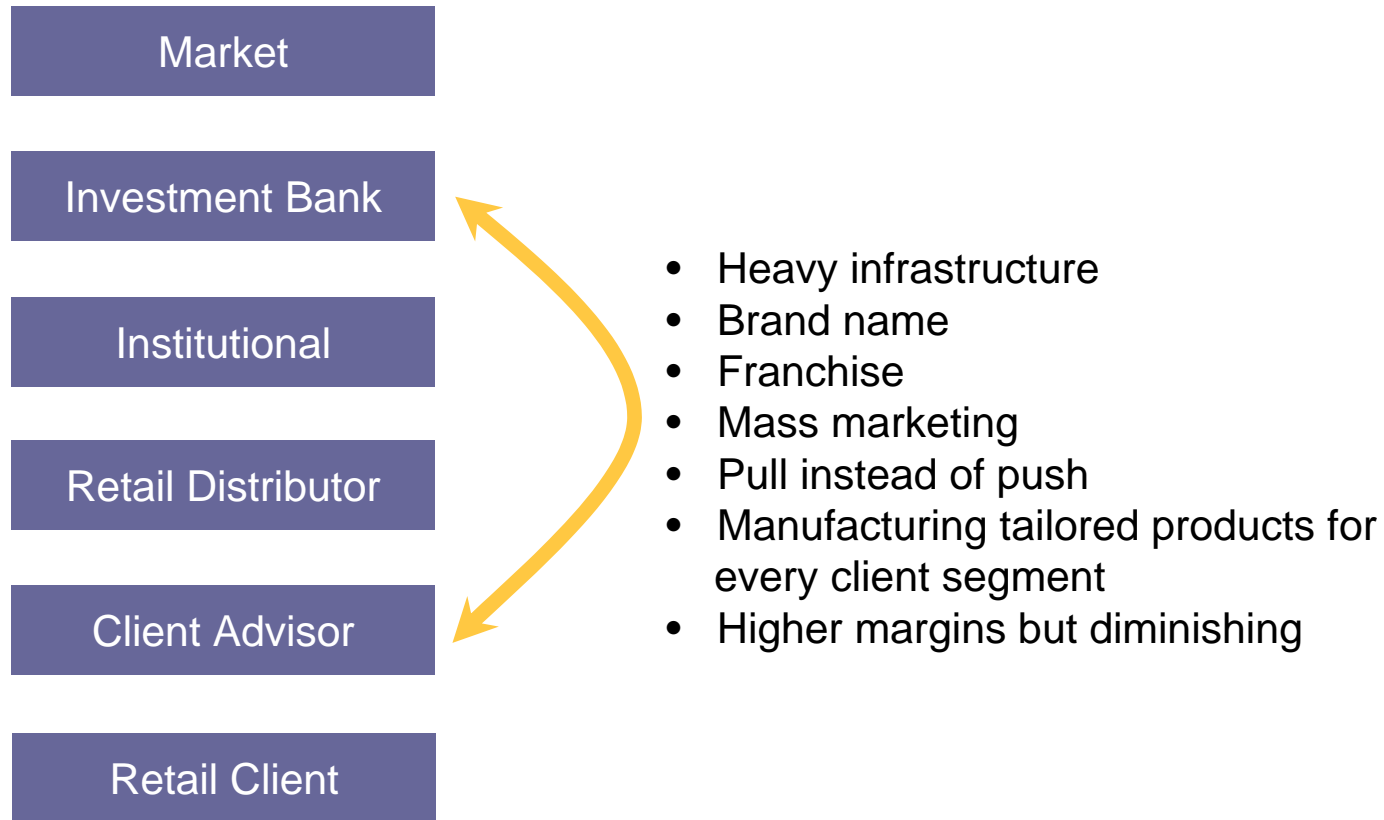
- Classical term sheet sales
- Competitive risk brokerage
- Component manufacturing
- Payout formula innovation
- Low barriers to entry
- Low margins

Disintermediation: The rise of the self-directed client!

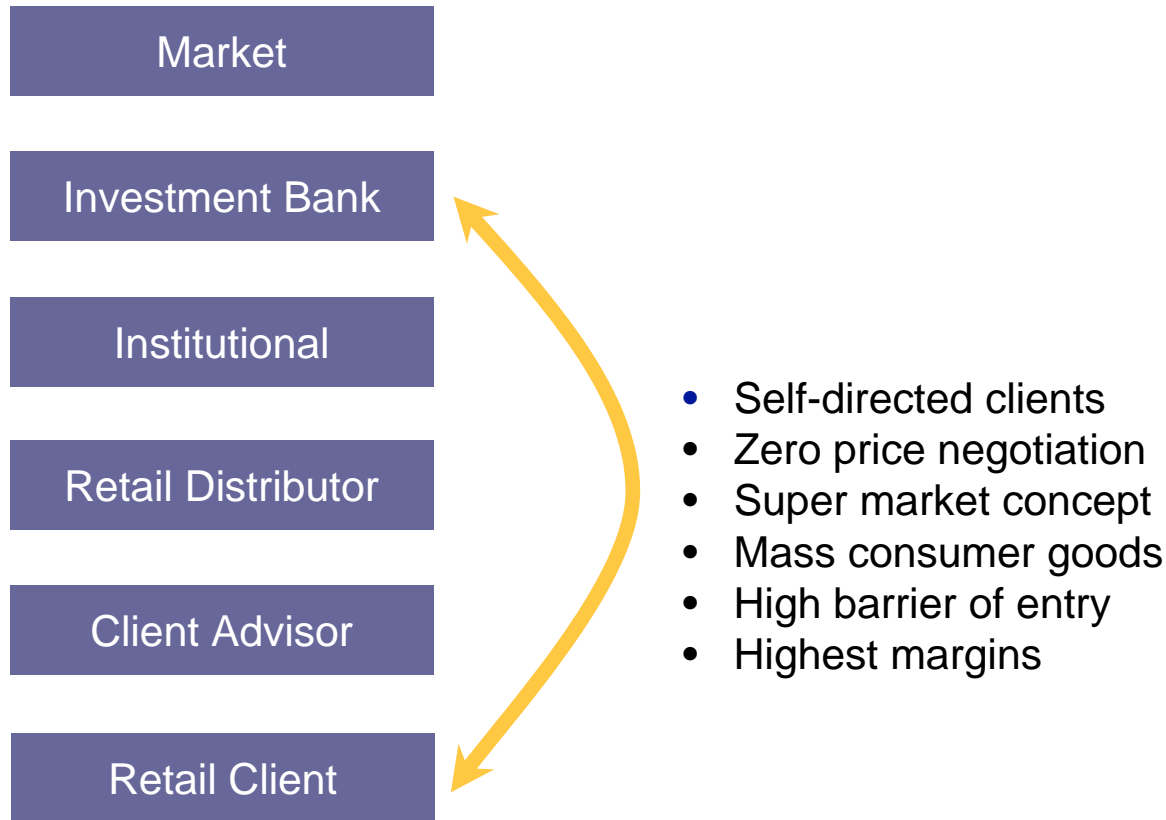


- Third party distribution
- White labelling
- Open architecture
- Wrapping / marketing / technology
- After sales service
- Increased added value and dependency
- Higher margins but diminishing

Disintermediation: The rise of the self-directed client!



Disintermediation: The rise of the self-directed client!



Disintermediation: Summary

Disintermediation has some clear implications on the way foreign exchange markets will develop:

- Core product
- Competition
- Transparency
- Risk

Retail FX is a core product

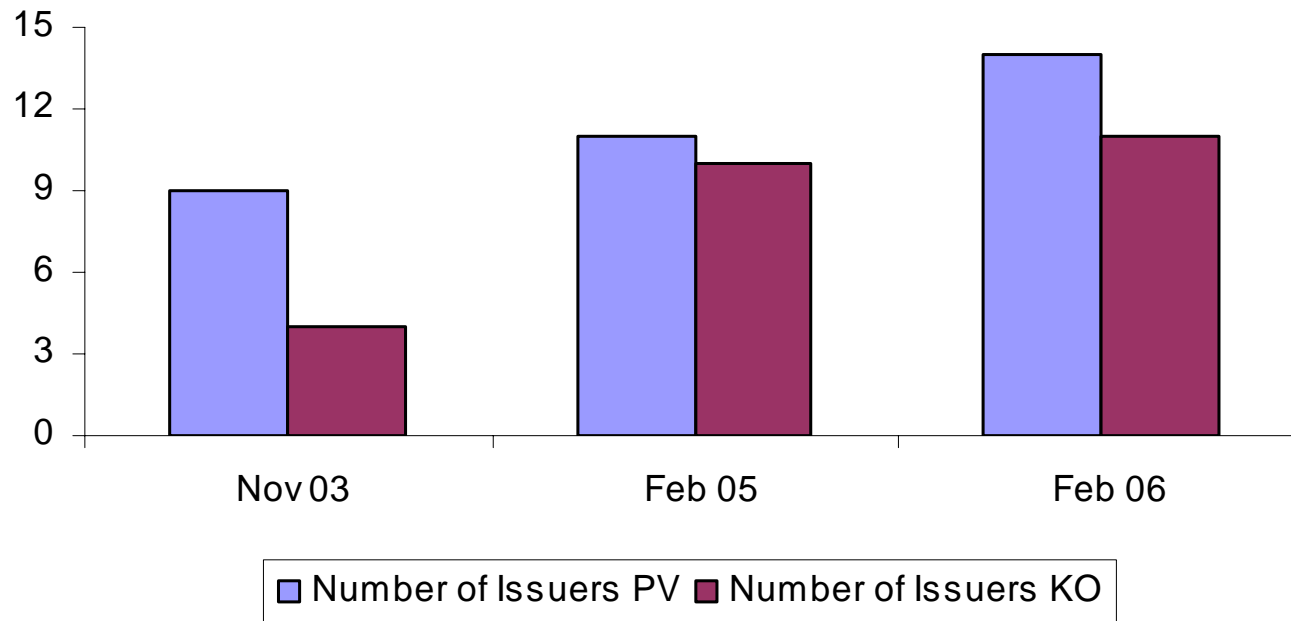
Investment banks will focus on retail FX the way they focus on institutional business.

Retail FX is attractive. It still offers high margins (compared to institutional business), has high customer retention and high barriers of entry for new market participants.

Instead of just producing components investment banks want to manufacture the complete „car“ in order to capture the full retail margin.

Retail FX is a core product

Number of Issuers in the German Retail FX Market



Source: DB internal research

Competition

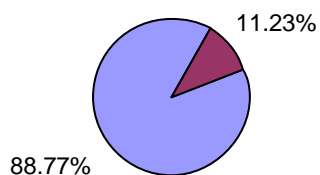
Only a few players will be able to play the retail FX game

Not every financial intermediary that serves institutional clients will be able to go straight to the retail client because of infrastructure, marketing and brand considerations. Furthermore, barriers of entry are high for every new market participant. Retail FX will be dominated by a only few players.

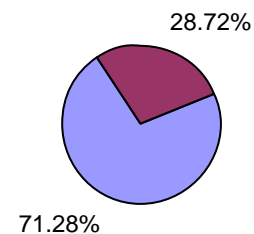
Retail FX is part of the „retail supermarket“. The retail client does not want to go into three different shops to buy the things he wants. He likes the all-embracing supermarket concept.

Competition

Market Share of the three biggest Issuers of Plain Vanilla Products in Nov. 2003



Market Share of the three biggest Issuers of Plain Vanilla Products In Feb. 2006



■ Top 3 Issuerers ■ Others

Source: DB internal research

Transparency

The process of disintermediation will increase transparency in the retail market

Disintermediating third party distribution means that retail investors will be treated the same way as institutional clients. Retail investors will be able to use the same e-trade technology as the professionals. Information will be available in the same way it is available to the institutional world.

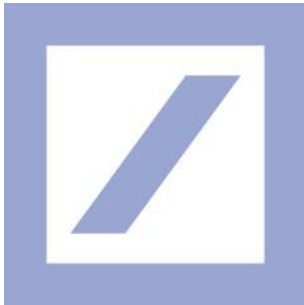
Financial authorities will shift their focus on the retail FX market in the same way financial intermediaries look at retail FX as one of their core markets. Again, market transparency will benefit from this development.

Risk

No new opportunities without risk

- Heavy Infrastructure
- Marketing
 - Brand Name
 - Franchise
 - Mass marketing / Mass Consumer Product
- Legal & Regulatory Risks

3 Retail FX – Outlook & Summary



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FX as an Asset Class

Shift in Focus

In the past, foreign exchange was hardly seen as an asset class in its own right. With „traditional“ asset class returns (equities, rates) under pressure over the last years investors search for alternatives. Credit, foreign exchange and commodities are now in the spotlight when it comes to generating extra returns and diversification.

Speculating & Hedging

The same development can be seen in the retail market. FX as an underlying becomes more and more attractive for investors with a certain risk-appetite. The need to generate alpha is with alternative assets is growing. Furthermore, the lives of private individuals become more and more cosmopolitan. Retail customers feel the need to hedge their private wealth currency exposure.

Further Convergence

Institutional versus Retail

Institutional clients discover foreign exchange retail products as an investment opportunity. Especially features like liquidity and transparency (especially true for exchange traded products) as well as regulatory features are very appealing to institutionals. Furthermore, the wide range of available wrappers make it interesting for investors and corporations to use products that were initially aimed at retail.

In summary, boundaries between what we now call institutional business and what we categorize as retail will diminish.

Market participants and regulatory bodies will need to have the same focus on the retail part of the business as they have on the institutional business.

Discussion Points

Retail FX & Market Liquidity

Retail investors bring new and significant liquidity into the FX market.

At the moment all markets are exposed to an oversupply of liquidity:

- How will the market handle the new inflows?
- Are these inflows significant enough to have a significant inflow at all?
- Will retail investors be the last in the food chain?
- Will they be able to invest in a market opportunity only after everyone else did?
- Will institutionals keep their advantage?

Discussion Points

Retail FX & Market Crises

So far, private individuals investing in FX have not really experienced a significant market crises (as they did for example in the equity bear market from 2000 to 2002):

- How will retail investors react to a crises in the foreign exchange market?
- Do retail investors understand the risks of investing in the FX markets (especially emerging currency markets, carry trades)?
- A lot of private individuals have exposure to currency movements without being fully aware of it (foreign currency loans, equity investments abroad, etc.). Do they understand their portfolio risk?

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