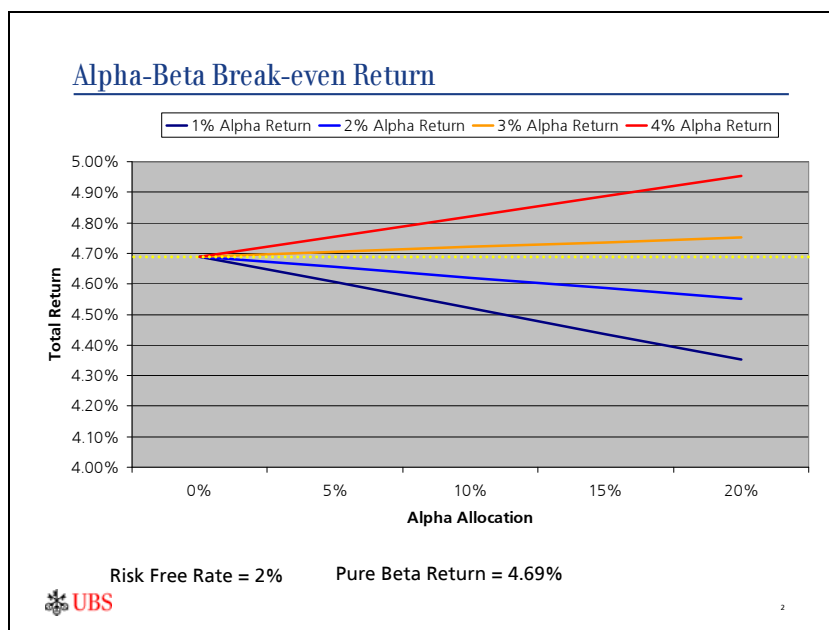


Christoph Schenk

When I read the framework for this session, I sensed some tonality of "If pension funds want to keep up their pension promise, they need to generate more Alpha returns, Beta is dead". This is the classical view but reality is much more complex. Let me start with a clear warning to all pension fund boards of trustees who think in this simple way: Alpha alone may damage your pension promise!

Let's look at the Alpha-Beta break-even return:



The idea behind this graph is as follows: I could have a pure Beta portfolio, meaning in essence that I would just replicate indices. That could be done very cheaply by using standard investment products. We assume a risk-free rate of return of 2%. I expect a Beta return of 4.69%. That would be sufficient for me right now to fulfill my pension promise, without even needing an Alpha portfolio.

Now, if I wanted to introduce Alpha, I would have to give up some of my Beta portfolio because I need money to fund the Alpha portfolio.

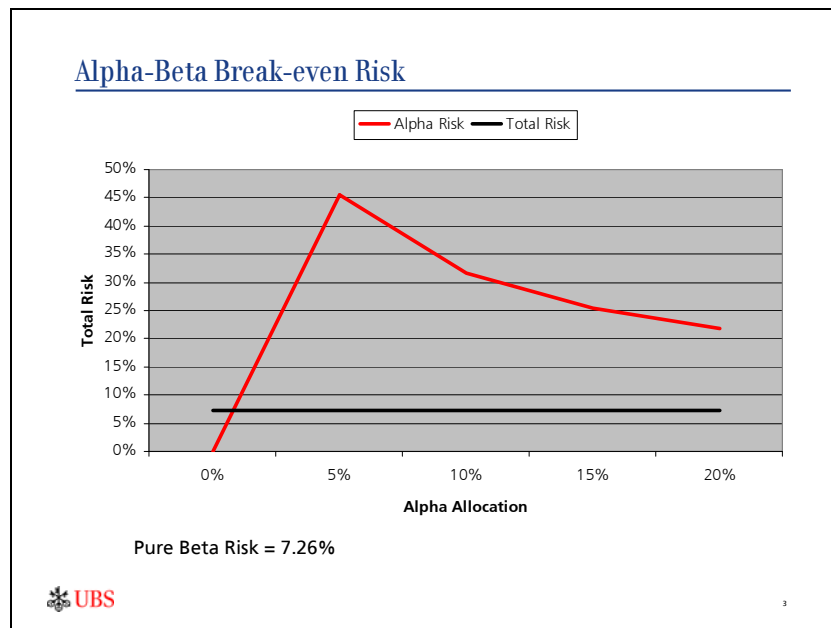
If I reduce my Beta portfolio, for instance by taking out 5% cash, the return on the remaining 95% will also go down 5%. The question now is: How much return – net of cost – do I have to generate in my Alpha portfolio to compensate for the 5% cash I took out of my Beta portfolio?

The graph shows that, if I cannot produce more than 3% Alpha return net of cost, I have introduced Alpha but at the same time damaged my overall return. If I look at many hedge funds and the associated total cost of investing in them, this becomes very relevant.

The lower the risk-free rate of return is, the more Alpha return I have to produce in order to make the whole exercise worthwhile. The good thing is: The lower the risk-free rate of return, the higher the leverage I can get on the market. Rising interest rates are bad for the Alpha business because, if I can get a 4% risk-free rate of return, why should I buy Alpha products? The bad news of course is: If interest rates are going up, inflation is ahead.

That is the return part. My bottom line is that you need a lot of Alpha return net of cost, just to break even with a traditional Beta portfolio return. And at that point, you have no extra money left yet!

Now let's look at the risk side:



The horizontal black line in this graph is my constant risk in a pure Beta portfolio, here at 7.26%. Now I switch again 5% of my portfolio into an Alpha portfolio. The red line shows the degree of risk I can take with Alpha investments so that the overall risk in the portfolio remains unchanged.

If I apply only 5% Alpha to my portfolio, I can have almost 45% risk within those 5%, which is very attractive. But the more Alpha I introduce, the less risk I am allowed to have. If I did 100% Alpha, I could have only 7.26% risk, and that will not produce the net of cost return I need. That investment strategy would cost a lot of money. Too much Alpha therefore does not help my overall portfolio. The Beta part will always remain attractive to me, even if that is not attractive for the banks, the brokers, the fund managers and their shareholders.

So, we have seen that more Alpha investments do not solve the problem. The hot investment ideas of the day which promise a high Alpha return ultimately do not help and they cost a lot of money. Not acknowledging this simple fact is a fundamental mistake when we look at the way many pension funds are served today by asset managers, and indeed how many pension funds themselves think.

From Asset-only Thinking to an Asset/Liability View

For fund managers who think in asset terms only, Alpha versus Beta is the logical discussion and Alpha then equals "good" whereas Beta equals "bad". That is a very simple world.


Pension funds should not look at the world this way. Pension funds do have liabilities and therefore they must think in terms of assets and liabilities.

I look at my portfolio no longer as Alpha or Beta, but as a bundle of risks. The only relevant questions then are: First, which risks do I *have to* incur, because I am a pension fund? And second, which risks *should* I take, and do I get adequately rewarded for taking them? Under this approach, Alpha and Beta lose their relevance.

How to compose your bundle?*

- ◆ Get a risk budget
- ◆ Split-up the market risks:
 - Liability risk -> market risk
 - Dynamic risk
 - Security selection
 - Currency management
 - Altering market risk over time
- ◆ Time risk -> split-up time horizon to adjust asset mix
- ◆ Model Liabilities mark to marked to get your policy portfolio and to understand you balance sheet risks

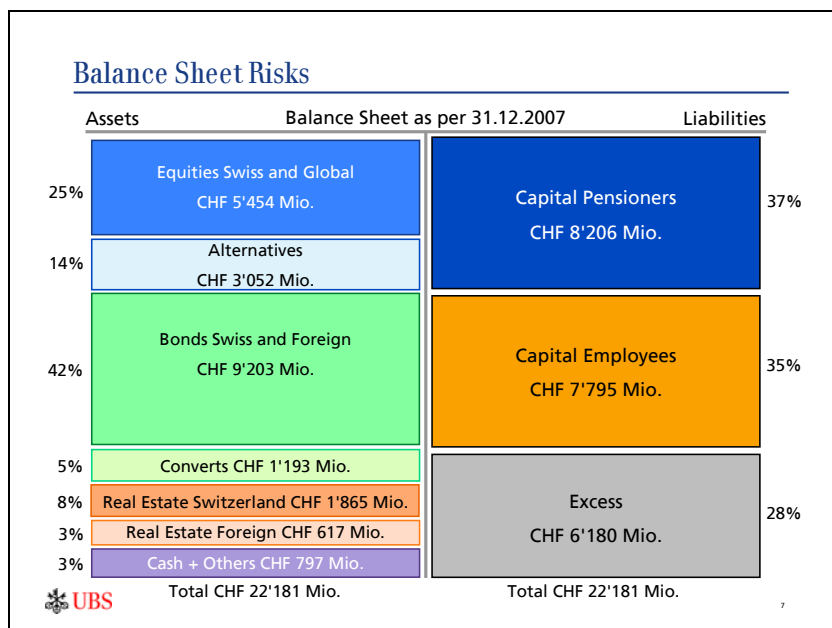
* see also: Singer, 2007: Risk Capital Allocation: Beyond Traditional Asset Allocation Approaches



If you start to think in that way, the first task is to determine what your risk budget is. That is the first question for the Board of Trustees: What is our risk budget? In the past, the approach was the other way round. They always started with the asset allocation, and then they discussed their risk budget. However, the asset allocation is a function of the risk budget.

Once you know how much risk you want to take, you can then split up the market risks. My slide gives just one idea how this could be done. The risk could also be split up along a time horizon. In that respect, the common view is that pension funds are long-term oriented. That is true by nature of our business but less so by action, because we have to report performance at least annually. We are a short-term oriented business with long-term risks.

The key issue is to be aware of the nature of your liabilities, and then you need to find the products in the market that best match those liabilities.



To use a concrete example, here is my real world as it was at the end of last year.

My capitalized pension promise at the end of last December was 8.2 billion Swiss Francs. When an employee is retiring, we take his or her whole amount of accrued money, and "issue" a 17 year bond

which is repaid in monthly installments. For the risk that the pensioner is still alive after those 17 years, we also "issue" a longevity insurance policy that will continue paying out money for as long as the pensioner lives, even if the "bond principal" is used up. The total of "bonds outstanding" is represented by the blue box (Capital Pensioners), whereas the insurance money is funded from the grey (Excess) box.

The same principle applies to the working employees. We issue bonds every month – actually rather structured notes, called "contributions". The employees hope that I will generate a decent return on their assets. In the Swiss pension fund system, we have to give a capital guarantee. Every contribution collected is guaranteed at a 100% level. Now we are 16 billion short in assets. On those I have a pure interest rate exposure. On the liability side I pay 3.5% interest, and on the asset side I have an interest rate exposure to the capital market. I am heavily tilted towards interest rates. The excess to cover everything is my equity (volatility reserve). I need to be careful to reduce the volatility of my equity, because if I have low volatility, I need fewer reserves to fund.

If you look at the mix of assets in my balance sheet, roughly 25% of are held in illiquid instruments (alternative investments and real estate). This is not a good ratio, because illiquid assets require more reserves to fund. One could ask whether this illiquidity is worth the extra money needed to underlie it.

I have different things as well: The blue box is a preferred and the orange box is a subordinated debt element. This would be relevant in the case my fund went bankrupt. Those liabilities take the characteristics of a structured product. And the grey box could be seen as an over-collateralization of the blue and the orange boxes.

We still produce a traditional balance sheet, because the regulators want to look at our pension fund in this way. We however, look at it in a different way. We no longer look at how much of each asset class we have, but how much of each risk type we have. Risk is the driver!

We built a core portfolio that consists mainly of passive elements such as indexed equity investments. Even the bond part is driven by government bonds. If we want to play corporate spreads, we do not do that in the core portfolio anymore but in a separate portfolio called "active strategies".

Our internal labels do not match those shown to the outside world. For instance, we do not put our private equity under Alternative Investments, because that is just a marketing label. We put it under equity and there in the illiquid section. We do not want to see the marketing labels. We want to know how the cash flow is generated, what risk is involved and whether we are compensated for taking it.

So in the end, what do we need?

What do we need?

- ◆ Stop thinking asset only
- ◆ Stop selling us products, we need solutions
- ◆ Stop thinking in Alpha versus Beta, we have liabilities
- ◆ Stop sending sales people, we need partners who understand the Pension Fund business
- ◆ We buy risks and we want to understand how we get compensated



- We need service providers who do not think just in assets terms.
- We need solutions, not the hot product of the day. The hot idea will usually not fit into our asset/liability stream.
- We do not think in Alpha versus Beta. We do not care about that; we just want to be compensated for the risk we take.
- We want partners who understand the pension fund business, not just sales people.

Finally, the major trend for the large pension funds as we see it: On the one hand, we will have much more commodity driven products. I do not mean commodity in the sense of an investment category, but in the sense of commodity products that produce "stable" returns at low fees, like indices products. They generate low fees for the sellers, so they need to sell them in high volumes.

On the other hand, there will be the special "Alpha deals" beyond the core portfolios. Pension funds will use them if they are really confident that they are adequately compensated for the risk they take. That again requires precise knowledge of what they are doing to buy. But at the end of the day, in my opinion, even in the Alpha deals, you ultimately get compensated simply for providing liquidity into the market. In the end, we are back to a banking business approach.

Catherine Weir



The high net worth segment of wealth management is the fastest growing part of the financial services business. It has reached that position over the last few years. The definition of "High Net Worth", however, has as many variations as there are private bankers. Let me first share a few facts to set the backdrop:

Market Growth

- Global private banking assets under management increased 128% year on year over 2007 to US\$7.6 trillion
 - Equal to the combined GDP of France, Germany and the UK
- Net income growth for the industry averages 44% year on year
 - Diversification of geographic sources: China shows overall fastest growth
 - Russia and India are also growing rapidly
 - Europe maintains first place with nearly 42% of global assets under management
- Wealth creation: self-generated wealth rather than inherited
 - Reflects that this is new wealth being created and not a result of increasing asset prices
 - Services needed may include things such as investment banking for business
- The wealth of the world's HNWIs increased 11.4 percent to US\$37.2 trillion in 2006
 - The number of HNWIs in the world increased 8.3 percent in 2006 to 9.5 million and the number of ultra high net worth individual grew by 11.3 percent to 94,970.
 - China's HNW population grew by 7.8 percent and Russia's increased by 15.5 percent

Sources: Euromoney survey of 398 private banking and wealth management institutions; World Wealth Report by Merrill Lynch and Caggemini

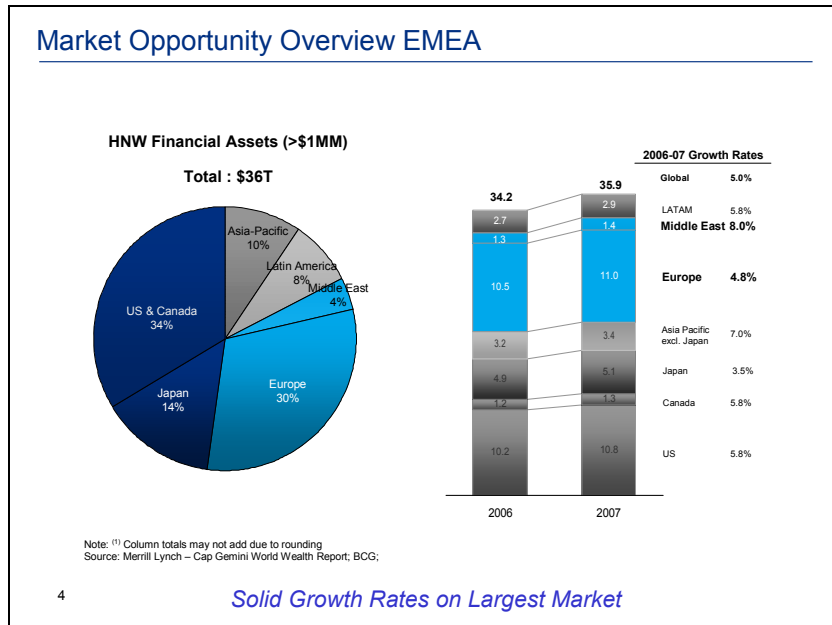
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Global private banking assets under management increased 128% year on year over 2007.

The net income growth for the industry in that segment averages 44% year on year. The engines of that growth are China, India, Russia and Brazil.

Wealth creation continues: Over the next 20-25 years, two billion people in Asia will join the official economy. That underlying movement will power growth for a very long time. This wealth is newly created, as opposed to being inherited, and it is not the result of rising asset prices. This is extremely important for us, as we have chosen to compete for this new market.

Depending on the data sources used, there is something in the order of roughly ten million individuals in the world with a net worth of one million US dollars. There are some 10,000 individuals with a net worth greater than 30 million US dollars. There are studies saying that China is creating one hundred millionaires every day.

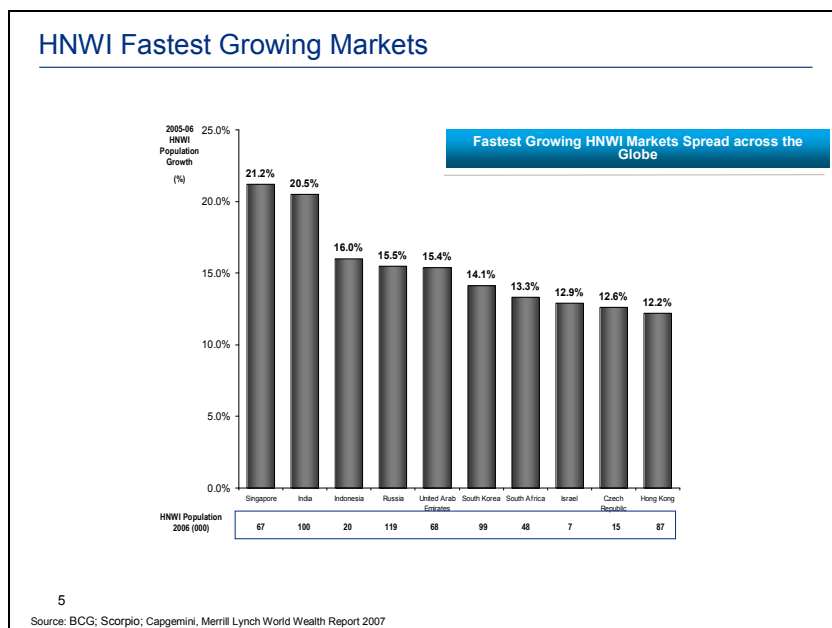


This shows where the wealth currently is. We are in the midst of a strong growth period across the board, and particularly so in Europe and the Middle East.

The difference between the 42% hosted in Europe mentioned in my previous slide, and the 30% in this one is due to different client segmentations used by different people.

The Middle East experiences a renaissance of unprecedented scale with regards to the creation of wealth and the requirement to invest that wealth in a safe and sound fashion.

Africa is a new frontier. I would expect in the next few years for us to see wealth being created around the resource activity and around direct investment. That will over time become a very interesting market.



When we look at the segments in which the growth is occurring, it is the developing markets that are hosting this growth: Hong Kong with the lowest rate of 12%, to Singapore with a staggering 21%.

This is also important for the discussion on what locations have the potential to be the next financial service centers, and which ones are less likely candidates.

These factors are powering an immense change in investor preferences.

Investor Preferences

- As the level of sophistication of customer needs grows, product shifts occur towards tailored solutions
 - As “emerging markets” emerge fully, more developed onshore wealth management capabilities and product localization are demanded
 - Trend towards advised wealth management services (away from broker/dealer model) continues in Europe, LATAM and Middle East
- Products such as hedge funds, private equity and real estate are becoming increasingly important in client portfolios
 - Capital markets based strategies remain in demand
- Customer priorities are shifting
 - Capital protection becomes a key consideration
 - Liquidity, diversification and growth are other key motivators
- Less demand for credit products, more demand for equity flow and fx in capital markets arena
- Private equity and direct investment
- Alternatives increasing in a number of portfolios but retain a steady percentage allocation

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Continuing to create wealth is a large concern of the clients we work with. As they become more sophisticated, their needs are shifting dramatically towards tailored solutions and advisory business, away from simple product sales.

Currently, and this is in the wake of the markets in March and April which have seen the most violent swings in perhaps the last twenty years, many clients are now re-setting their investment ambitions and adjusting their investment styles. Their priorities are shifting. An increased risk alertness (not risk aversion!) has entered into most clients' decision making progress going forward. At the moment, there is a curbed appetite for credit products, and capital protection is a concern.

Real estate is and will continue to be a dominant asset class in this client segment.

Alternative investments will continue to take their space although, generally, the asset allocation of our clients towards alternatives is relatively modest and we expect little growth here.

One of the large features in the HNWI segment, particularly in Europe and the Middle East – less so in Asia although that may change – is the creation of family offices, and the evolution of that into the Private Executive Office. The PEO provides a professionally organized treasury and investment management office to meet the clients' ambitions with regards to managing their wealth. Interestingly, if you listen to a group of clients talking to each other, they are not discussing their investment performance, but each other's organizational set-up for wealth management. They ask how many people run the office, who the cash manager is and who the securities settlement agent. They want to be sure that they have the most efficient set-up in place, and this is not just for the front part we are dealing with, but end to end, down to the last settlement confirmation.

We have a dedicated group of people, the Investments Advisory and Analytics Group. They are scientists who sit down with our clients and design asset allocation strategies; they mix solutions for them. We deploy open architecture, so we contract with many product manufacturers making sure we provide the best solutions to our clients, which are not necessarily always Citi products.

It is not only the products that need tailoring to the clients' needs. Our clients also prefer different investment styles – not all billionaires are alike! Bespoke solutions and accommodating the very individual nature of how clients want to invest is very important, but it puts a lot of pressure on the front

end and also on all involved parties along the process chain.

Some of our clients are *self-investors*. They have their own analysts and they know exactly where they want to invest. So they may instruct us to buy a million shares of IBM and they expect from us only precision execution.

Family offices are a tremendously growing trend as I mentioned, and we will see much more growth in this area.

Active traders want to engage with us every day. Not every client wants to be called on a daily basis and it is important to know who does and who does not. Some clients even want to be called every hour with an active market update. Some are very participative. They want to hear an idea, discuss it, agree on it and then it is on us to execute. This is very different from the self-investor.

Lastly, the *asset allocator* tends to follow the typical private banking asset allocation models.

So we look at the different types of investment styles our customers prefer, not just at their wealth categories. Some clients do tend to have biases based on their net asset categories, but not all have them and it should never be assumed.

HNWI clients require a very exacting service. Interestingly, it is the last thing we do in the processing chain that defines the client's experience. The client remembers the operational mistake, not what happens at the front end. That is very important to know.

The demand for talent to help the clients with their individualistic, bespoke needs, while they are in the wealth creating cycle, is intense. It is often entrepreneurs going for an IPO that are creating tremendous opportunities for us in the developing markets.

Conclusion

- Trends
 - Accelerated creation of wealth
 - Increasing sophistication of clients
 - Individual styles refining strategies
 - Accelerated family office creation and management
 - Increased risk alertness in current market
 - Differentiation in service models
 - Demand for talent evolving

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To conclude, these are again the big trends in summary:

- Accelerated creation of wealth, given the macroeconomic growth in some world regions. Huge population segments are coming into the official economies. IPOs are frequent, and IPO clients offer the greatest opportunities.
- Those IPO clients have their own resources to get the best information and the best skills. It is our challenge to reach out to these clients with even better skills, better information and best execution.

- Investment styles are extremely different.
- Family Offices and Private Executive Offices will continue to evolve. They are a more organized way of managing wealth. Large private investors will look more like wealth management companies. In some cases, clients we work with are managing more money than pension funds or small banks. They are increasingly looking for robust techniques and management structures.
- Risk alertness; this is particularly pronounced in the current market phase.
- We constantly have to refine our client service models to make sure that we handle each client end-to-end in the exact way he requires. This may for instance mean that we give big private clients access to our institutional platforms for best execution.
- And finally, demand for talent will continue and accentuate.
