Estimating the Value of Swiss Banking Secrecy by Means of a Statistical Model

Thesis to be Awarded a

Bachelor's of Arts Degree

in

Banking and Finance

with the

Swiss Banking Insititue of the University of Zurich

and particularly

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Executive Summary

Over the period June 2nd 2003 to February 19th 2009, Switzerland came under increasing pressure to abolish banking secrecy and adapt international standards of tax cooperation. The bone of contention was, as always, Swiss banking secrecy, or rather, Bank Client Confidentiality, the law that forbids banks to exchange financial and personal data with foreign authorities and in most cases, even Swiss authorities. It is vested in Art. 47 of the Banking Law which was introduced in the 1930s to make it harder for foreign secret services to bribe bankers to release sensible client data. Nowaday, Swiss banking secrecy cannot be used any more to hide money originating from crime or intended to finance it.

There are reported cases on which banking secrecy was lifted and data handed over to foreign police, a notable example being the Jan Ulrich dope case. On July 24th 2007. *Neue Zürcher Zeitung (NZZ)* reported that the Federal Court rejected a complaint by Mr Ulrich and paved way for an investigation at whose centre stood a Belgian doctor supported of having doped Ulrich, financed by the latter's Swiss bank account.

Many have argued that banking secrecy has a value to Swiss banks, and Messrs Delaloye, Habib and Ziegler have put forth in their analysis "Negotiating over Banking Secrecy: The Case of Switzerland and the European Union" (2005) a viable approach of measuring it. At the heart of their model, as of this present here, is an analysis of announcements around banking secrecy. Those affecting banking secrecy itself, its legal framework or a major bank operating under it were considered relevant. In this thesis, there are 44 such events, which were obtained from the archives of *NZZ*, the Zurich-based quality newspaper with extensive market and business coverage.

Four banks, UBS, Credit Suisse, Bank Julius Bär and Bank Vontobel were considered for the evaluation. Two universal banks with international presence and a variety of business models contrast the two traditional wealth managers. The assumption goes as follows: if banking secrecy has a value at all, it would surely be less valuable to the diversified universal banks than to the two private banks. The bank pairs – universal and private – were assumed to return similar statistics.

In a first step to value banking secrecy, a market regression model of the following form is set up: the FTSE Eurotop 100 Index in CHF acts as an independent variable – the index of the 100 most highly-capitalised blue chip companies in Europe – , as using the SMI would be risky: the Swiss economy as a whole could be affected by a downfall of banking secrecy and the results of the model, which are solely targeted for abnormal returns, would be useless. In order to account for non-synchronous trading, 1-day and 3-day windows of the market were used, the 3-day window consisting of the actual day of the event and a lead- and lag-term. This was done to account for the effect on non-synchronous trading, as the two private banks have a far lower market capitalisation and trading volume than the two universal banks.

In a second step, the event days were accounted for in the model, which they were not previously. So, for 1-day windows, there were $K = 44$ event days which each were associated a dummy variable that took the value of 1 on the k-th event day and 0 for any other. For 3-day windows, there were 127 event days, five less than one would expect. This is down to the fact that sometimes, event days lay less than two trading days apart, which left no room for complete 3-day windows.

With this model now regressing the four bank stocks daily returns against the FTSE Eurotop 100 Index, the author first analysed event day abnormal returns as OLS-adjusted returns in more detail, for both the 1-day and 3-day window. The significance of these abnormal returns was assessed using a t-test for the significance of the dummy variable coefficient – at the same time acting as the abnormal return itself – on the actual event day. It was found that there are only four significant (5% level of confidence) abnormal returns for UBS, three for Credit Suisse, four for Julius Bär and only one for Bank Vontobel.

If banking secrecy had a more significant value to these banks, the amount of significant abnormal returns would certainly be higher. None the less, these significant abnormal returns can be used to identify return behaviour on particular relevant event days: event 43, which was the day when it was revealed that Bradley Birkenfeld, an ex-UBS banker was connected to a major international fraud including a planned theft of over 90 million Swiss Francs of Kenyan state accounts. Both UBS and Bär show significant negative abnormal returns on this day, both for the 1-day (-7.82% and –6.36% respectively) and 3-day window (-13.01% and –8.01% respectively). But why was Bär affected? The author suggests that Julius Bär was not negatively affected by the case itself, but by the negative effect it had on Swiss banking in

general, and surely, the pressure that would build up on banking secrecy whenever something similar happens. Another interesting point to note was that even though Vontobel is a traditional wealth manager, it never seemed much affected by the turnoil around banking secrecy: a possible explanation could be its strong asset management business which the bank has successfully built up.

Deepening the analysis, cumulative abnormal returns (CARs) were computed to the end that a lower boundary for the value of banking secrecy may be computed as the difference between the lowest and highest CAR. The lowest CAR was the day when investors were most pessimistic about banking secrecy, the highest when they were most optimistic. The difference. This is why the difference can be used to assess the value of banking secrecy. Doing this, the value of banking secrecy for UBS ranges from 16.36% (1-day) to 47.31% (3-day), that for Vontobel for instance, from 16.45% to 39.71%, which is much lower than that of Julius Bär. The value of banking secrecy for Bär is within the boundaries of assumptions, it ranges from 19.39% to 62.07% and proves the point that a private bank can be very exposed to the value of banking secrecy.

In an attempt to refine Habib's models, a probability term was introduced. It was thought that investors were very optimistic about the presevation of banking secrecy at the time the withholding tax agreement was signed in June 2003 and very pessimistic in February 2009, and the probability term was meant to reflect that. The problem with a probability term is that investors may change their definitions of what banking secrecy was supposed to deliver: they might not be assessing the probability of the same banking secrecy over the observation period, but adjust their expections repeatedly, even to more than one banking secrecy definition. As it is hard to take account of this, the model was run with the simple probability term and the same calculations were carried out again.

It was soon clear that the probability did not have a significant effect upon the model. 3-day correlations between abnormal return bank pairs on event days and over non-event days have seen a soothing, meaning to say that the differences between event days and non event days tightened. Generally speaking, including the model without the probability term, abnormal return correlations were higher on event days than over non-event days, the majority of them significant at the 5% level of significance.

Ad conclusio, the value of banking secrecy estimated with the probability term model showed little differences only, for instance, the lower boundary for UBS ranges from 16.18% to 34.39% (for 1-day and 3-day windows respectively). The other banks were not significantly more affected.

A complete new approach was then tried by assuming the following: if Swiss banks would really be subject to a valuable banking secrecy, then they would have to outperform their international competitors who were not as lucky as to operate under such privacy provisions, all else being equal. If this was the case, then a market model that would regress the four banks against the MSCI World Banks in CHF would produce significant results. Either the intercept was greater than zero, showing a constant surplus of "Swiss banking secrecy" or the coefficient of the market model would be. In a first run, significant results showed up for Bank Julius Bär, but the model had to be refined to make use of events. Instead of looking at events individually, events were formed into event frames, each a semester long, that would, depending on event over days density, be considered event- or peaceful. Binary dummy variables would account for groups of these frames.

The idea on how to assess a value of banking secrecy would be to take the lowest and highest average abnormal return over a group of event frames and then discount it at a risk-free rate. This way, one would get lower and upper boundaries for the value of banking secrecy by a more future-skewed approach. Why is the risk-free rate justified here? This is partially owed to the model, as it makes now assumption about the preservation about banking secrecy, but assuming that banking secrecy will prevail with a probability of 1, the outperformance that is discounted would be secure. However intruiging this model may sound, the results it produced for the value of banking secrecy were rather novel: banking secrecy may have a negative value, which though neglectably small (between –0.1128% (Basket) and 0.0068%, (Vontobel) played into the arguments of people like the late Bär and Dr. Leimer, whom the author interviewed.

Dr. Leimer was of the opinion that banking secrecy was overrated as it was no use to clients any more. The difference Swiss banking had to make was better performance, cost efficiency, service orientation and international market know-how.

It could well be true that after the handing over of 4’450 client names to US authorities by late August 2009, the days of banking secrecy may be counted and hence, the value of it is only of historical interest.