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Shareholder Report on UBS's Write-Downs

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UBS

Table of Contents

1. Introduction

1.1 Background

In 2007 and in relation to the first quarter of 2008, UBS AG ("**UBS**") has made several announcements of losses incurred in relation to structuring, trading and investment activities in mortgage and asset-backed securities, in particular with respect to securities referencing US "Subprime" residential mortgages. UBS first announced Subprime-related losses in connection with the closure of Dillon Read Capital Management ("**DRCM**") in May 2007.[1] UBS ultimately reported net losses of USD 18.7 bn in relation to US residential mortgage sector exposures for the year ended 31 December 2007 (the "**Subprime Losses**").

The Swiss Federal Banking Commission ("**EBK**") requested that UBS report to it the key facts relevant to understanding the principal root causes leading to the Subprime Losses. Based on UBS's current knowledge of the facts, UBS reported on 7 April 2008 on the factual basis of UBS's Subprime Losses, as well as a preliminary analysis of the root causes leading to such losses. UBS has not yet provided a comprehensive report to the EBK on remediation or other actions taken (or to be taken). UBS will formally discuss these matters with the EBK at a later date and will then communicate them to its shareholders in due course.

This Shareholder Report (the "**Shareholder Report**") sets out UBS's key findings, including the principal causes of the Subprime Losses UBS identified in retrospect following an internal review of the various businesses incurring the Subprime Losses. While not addressing every detail that UBS discussed with the EBK, the Shareholder Report provides (within the relevant Swiss data protection laws and business secrecy limitations) a comprehensive overview of the relevant developments that led to the Subprime Losses, as well as the relevant causes and contributing factors to those losses.

KPMG Ltd, Zurich, has read this Shareholder Report and the report to the EBK (consisting of a factual report, appendices and an executive summary) and determined, in their professional judgement, the Shareholder Report contains a reasonable summary of the information that UBS included in their report to the EBK. The KPMG letter is attached hereto as Appendix 1.

1.2 Context for Findings in this Shareholder Report

The findings presented in this Shareholder Report must be viewed in the context of market events. Many market observers have characterized the period beginning July 2007 as reflecting an unprecedented dislocation in credit markets (particularly with respect to Subprime securities), as well as an unprecedented lack of liquidity. The facts and business practices described in UBS's analysis should be viewed in the context of wider industry practices and investment strategies that were pursued by many financial institutions during the period. Based on publicly available information[2] UBS believes that its approach to the

[1] In the quarter ended 31 March 2007, DRCM had incurred trading losses on Subprime-related positions of about USD 150 m.

[2] For example, the report by the group of regulators known as the "Senior Supervisors Group" entitled "Observations on Risk Management Practices during the Recent Market Turbulence" issued on 6 March 2008 (a copy of this report can be obtained at http://www.ebk.admin.ch/e/aktuell/20080306/20080306_02_e.pdf) and the Interim Report of the Institute of International Finance Committee on Market Best Practices issued on 9 April 2008 (see http://www.iif.com/download.php?id=SDzcEc8juCI).

risk measurement and valuation of structured credit products reflects issues which were not unique and that a number of other financial institutions with exposure to the US Subprime market used similar approaches.

In reviewing this Shareholder Report, it is also important to note that UBS's analysis was prepared after the US Subprime market suffered the unprecedented dislocation referred to above. Specifically, this Shareholder Report was prepared with the benefit of hindsight and with the knowledge of the Subprime Losses experienced by UBS.

This Shareholder Report addresses only UBS's positions and losses related to the US Subprime residential mortgage market as at 31 December 2007. UBS has other substantial positions arising from US and non-US residential and commercial mortgage businesses and trading strategies, which are not considered in this Shareholder Report. These have, where material to an understanding of UBS's financial position, been described in other publicly available materials, including UBS's Annual Report 2007 and related documents.[3]

1.3 Overview

Section 2 of this Shareholder Report describes the chronology of key events relating to the Subprime Losses incurred for the year ended 31 December 2007 and identifies the most significant businesses that together suffered the substantial majority of these losses.

Section 3 of this Shareholder Report describes the business model pursued by UBS as relevant to these businesses, and section 4 describes the particular businesses and how the losses developed.

Section 5 of this Shareholder Report considers risk management and risk control activities and section 6 describes UBS's key findings relating to the causes of the losses. In particular, this section considers:

- The implementation of UBS's growth strategy in these businesses;
- Governance;
- The funding framework and balance sheet management and control;
- Risk Management;
- Risk Control;
- Finance; and
- Compensation.

For ease of reference, a list of abbreviations and a glossary of financial terms is included in Appendix 2 to this Shareholder Report.

[3] A copy of the Annual Report 2007 and related documents can be obtained at http://www.ubs.com/1/e/investors/annualreporting.html.

UBS

2. Overview of Losses and Key Announcements

2.1 Chronology

The chronology of UBS's disclosure to the market of the Subprime Losses (and other significant events / announcements) is as follows:

- On 3 May 2007, UBS announced the closure of DRCM and net negative revenue at DRCM of USD 150 m for the first quarter 2007.

- On 6 July 2007, UBS announced that the Board of Directors ("**BoD**") had appointed M Rohner as UBS's Group CEO to succeed P Wuffli, effective immediately.

- On 3 August 2007, UBS announced the appointment of A Esteves as Global Head of Fixed Income for the Investment Bank ("**IB**").

- On 14 August 2007, UBS made a profit warning in connection with its disclosure of results for the second quarter of 2007. Specifically, UBS reported that "if the current turbulent conditions prevail throughout the quarter," UBS "will probably see a very weak trading result in the Investment Bank," and "this makes it likely that profits in the second half of 2007 will be lower than in the second half of [2006]."

- On 1 October 2007, UBS pre-announced that, after a write-down of Subprime positions, it likely would record an overall Group pre-tax loss of between CHF 600 m and CHF 800 m for the third quarter. At the same time, UBS announced a number of management changes, including that M Rohner would take over the role of IB Chairman and CEO, that H Jenkins would step down from that role, and that the Group CFO C Standish would retire (to be succeeded by M Suter, previously the Executive Vice Chairman of UBS). Additionally, J Scoby would become Group Chief Risk Officer ("**Group CRO**").

- On 30 October 2007, UBS reported an operating loss of CHF 726 m for the third quarter. This reported loss was within the range provided in UBS's 1 October 2007 pre-announcement.

- On 10 December 2007, UBS announced that it had taken additional write-downs of roughly USD 10 bn. As a result, UBS expected a loss for the fourth quarter and indicated that it might record a loss for the full year. At the same time, UBS announced measures to substantially strengthen its capital position, including a placement of mandatory convertible notes of CHF 13 bn with two strategic investors.

- On 30 January 2008, UBS pre-announced its fourth-quarter 2007 and full-year 2007 results. UBS reported an expected loss of approximately CHF 4.4 bn for full-year 2007, a fourth quarter loss of approximately CHF 12.5 bn, and an additional USD 4 bn in write-downs in positions related to the US residential mortgage market.

- On 14 February 2008, UBS announced fourth-quarter 2007 and full-year 2007 results in line with its 30 January 2008 announcement, with losses related to the US residential mortgage market of USD 18.7 bn. On the day before, UBS had also announced the appointment of J Johannson as Chairman and CEO of the IB and a number of additional appointments to the GEB.

Whilst outside the scope of UBS's report to the EBK (and therefore not within the scope of this Shareholder Report), UBS pre-announced its first quarter 2008 results on 1 April 2008. Based on preliminary internal estimates, UBS reported that it expects a net loss attributable to shareholders of approximately CHF 12 bn. The first quarter 2008 figures included additional write-downs of approximately USD 19 bn on US real estate and related structured credit positions. UBS further reported that its exposure to US residential Subprime mortgage related positions declined from USD 27.6 bn as at 31 December 2007 to approximately USD 15 bn as at 31 March 2008, and that the exposure to Alt-A positions declined from USD 26.6 bn as at 31 December 2007 to approximately USD 16 bn as at 31 March 2008. As described in the pre-announcement, these reductions reflect the results of asset disposals as well as the effects of further write-downs. At the same time, UBS announced a fully underwritten rights issue of approximately CHF 15 bn to strengthen Tier 1 capital and that M Ospel, Chairman of UBS, would not seek re-election at the Annual General Meeting of 23 April 2008.

2.2 Business Lines Affected by the Losses

UBS had significant levels of Subprime investments in three distinct businesses:

- Within DRCM, there were Subprime positions in the Reference Linked Notes ("**RLN**") program, the Asset Backed Securities Relative Value ("**ABS Relative Value**") strategy, ABS Collateralized Debt Obligation Trading ("**ABS CDO Trading**") strategy and in the US Short Term Asset Backed Portfolio. The business of DRCM was pursued within UBS Global Asset Management ("**Global AM**"), until DRCM's re-integration into IB in the second quarter of 2007. Most of DRCM's "legacy" Subprime positions were subsequently managed by the IB's Securitized Product Group ("**SPG**"). More detail on these DRCM strategies is provided at section 4.1 of this Shareholder Report.

- Within the IB, the Fixed Income business area's Rates business had Subprime positions. The Rates business had warehoused and retained Collateralized Debt Obligations ("**CDOs**") backed by Subprime collateral, including (in particular) Super Senior tranches of such CDOs. These Subprime positions were held principally by the CDO desk within Rates. More detail on this business is set out at section 4.2 of this Shareholder Report.

- Also within IB the Foreign Exchange / Cash Collateral Trading ("**FX/CCT**") business had Subprime positions in the ABS Trading Portfolio, which was a part of the overall Relative Value Trading Portfolio ("**RVT Portfolio**") managed by the IB FX/CCT ABS Trading team. More detail on this business is set out at section 4.3 of this Shareholder Report.

Losses on the DRCM trading strategies contributed approximately 16% of UBS's Subprime Losses for the year ended 31 December 2007. The IB's CDO desk contributed approximately 66% of UBS's Subprime Losses in the same period and losses from the FX/CCT business a further 10%. Other parts of the IB's Fixed Income business (such as the SPG Proprietary Trading desk and the Credit Fixed Income ("**CFI**") business) contributed to the remainder of UBS's Subprime Losses. Given the significance of the losses suffered by the three businesses set out above, these are the focus of this Shareholder Report.

3. Business Model Pursued by UBS in the Areas Affected by Subprime Losses

3.1 UBS Group – Overall Strategic Objectives

This section of the report briefly describes the process by which UBS determined its strategic objectives and then considers how relevant Business Group ("**BG**") strategies were implemented as relevant within the business areas giving rise to the most significant parts of the Subprime Losses.

3.1.1 Establishment of UBS Group Strategic Objectives

Each year, UBS produces a consolidated 5 Year Strategic Plan. UBS also produces a consolidated 1 Year Operational Plan. These plans are based on input from Senior Management in each BG and are submitted to the Group Executive Board ("**GEB**") and Chairman's Office ("**ChO**") for approval.

Once approved by the GEB, these plans are submitted to the BoD for approval, together with each BG's own 5 Year Plan presentation. In developing strategy, UBS applies a measure of aggregate risk exposure across all risk types and businesses, termed earnings-at-risk ("**EaR**").

3.1.2 UBS Group Strategy in 2006 and 2007

UBS's strategy is to operate as a global firm that concentrates on three global core businesses – (1) wealth management, (2) asset management and (3) investment banking and securities trading – as well as retail and corporate banking in Switzerland. One of the key strategic objectives was the integrated business model, with a "one firm" approach designed to facilitate client referrals and the exchange of products and distribution services between businesses and as a result contribute to revenue flows.

At the Group level, the 5 year strategic focus articulated for 2006 - 2010 was to aim for significant revenue increases whilst also allowing for more cost expansion. However the Group's risk profile in 2006 was not predicted to change substantially, with a moderate growth in overall Risk Weighted Assets ("**RWA**").

Key strategic growth initiatives for the UBS Group in 2006 included:

- Expanding market share in existing businesses, e.g. by attracting new clients in fast growing segments and increasing business volume with existing clients;
- Expansion in emerging markets, e.g. including the acquisition and integration of the Brazilian financial services firm Banco Pactual into UBS's IB, wealth management ("**WM**") and asset management operations;
- Expansion of business in the Asia Pacific ("**APAC**") region – with strategic emphasis on China, India and Japan and the domestic build-out of wealth management across APAC;
- Further US wealth management integration within Global Wealth Management & Business Banking ("**GWM&BB**") integrating product offerings and strengthening client services;
- Expansion of onshore European Wealth Management ("**EWM**") business; and

- Implementation of DRCM in line with announcements made in 2005.

The 5 year strategic focus as articulated in the 5 Year Plan for 2007 - 2011 confirmed the previous year's trend of double-digit top-line increases with a slower growth in non-personnel expenses. In 2007, increased overall RWA growth was predicted, with the IB contributing roughly two-thirds of the predicted increase.

The major strategic initiatives noted in the 5 Year Strategic Plan 2007 - 2011 to foster future revenue and profit growth included:

- Within GWM&BB, further emphasis on EWM and key client and product initiatives in WM US;
- Within IB, the development / integration of the Pactual business and of the Global Syndicated Finance, Real Estate and Fixed Income businesses; and
- Within Global AM, further diversification of investment capabilities, including DRCM, and further diversification into new markets.

In summary therefore, in the period most relevant to assessing UBS's Subprime Losses (i.e. 2006 / 2007), UBS at a Group level focused on initiatives that were intended to further implement the integrated business model and grow businesses in line with UBS's long standing focus on its three global core businesses. There was not, at the Group level, a particular and specific decision either to develop business in, or to increase exposure to, Subprime markets. Additionally, there was no specific decision substantially to increase UBS's overall risk taking in connection with these growth initiatives.

However, within the growth initiatives approved by the BoD and by Group Senior Management, there was, amongst other things, a focus on the growth of certain businesses that did, as part of their activities, invest in or increase UBS's exposure to the US Subprime sector by virtue of investments in securities referencing the sector. In particular, these included DRCM and the IB's Fixed Income business as described below.

3.2 Dillon Read Capital Management

On 30 June 2005, UBS announced the launch of a new alternative investment management business within Global AM. At the same time, it was announced that DRCM would be headed by J Costas as CEO (until then the IB's Chairman and CEO and a member of the GEB and deputy CEO UBS) and that J Costas would leave the GEB at the end of 2005. It was also announced that H Jenkins would succeed J Costas as IB CEO.

DRCM's formation dates back to strategy work undertaken in early 2004. The rationale for creating DRCM reflected a desire to:

- Establish a new alternative investment business;
- Diversify allocation of capital and risk appetite through third party investors;
- Meet client demand to co-invest in certain IB investment strategies;
- Support retention of existing talent and attraction of new talent; and
- Create a valuable franchise for UBS.

Whilst work on the creation of DRCM progressed for some time, decisions on the composition of the Senior Management team were made relatively late in the process. In consequence, the DRCM business case and internal agreements and arrangements to close the DRCM transaction were eventually effected with considerable speed and concluded with less opportunity for wider internal review than might otherwise have been the case.

On 29 June 2005, an agreement was reached that DRCM would receive the IB's Principal Finance and Credit Arbitrage ("**PFCA**"), Mortgage Origination Services Group ("**MOSG**") and Commercial Real Estate ("**CRE**") businesses, together with approximately 120 staff.

Oversight arrangements for DRCM were relatively complex and reflected a non-standard governance model. DRCM was held within Global AM for reporting and management control, but the IB was exposed to the risks and rewards of DRCM's performance in managing its proprietary capital within DRCM's Controlled Finance Companies ("**CFC**") – wholly controlled and fully consolidated UBS entities. To support UBS's strategic objectives to allow sufficient third party investment, DRCM also needed to establish separate Outside Investor Funds ("**OIF**"), in which UBS's risk exposure was limited to its minority interest. This additional organizational layer added complexity, because the OIF was overseen not by the IB but by Global AM's risk and control functions, in a manner consistent with Global AM's general approach to discharging its obligations to third party investment management clients.

On 5 June 2006, the IB's PFCA, MOSG and CRE businesses were transferred to Global AM as part of the formation of DRCM and on 1 November 2006, DRCM launched its first OIF.

The development of the DRCM trading strategies relevant to this Shareholder Report is described in further detail at section 4.

3.3 Investment Bank Fixed Income business

As a result of the agreements relating to the formation of DRCM, UBS made two senior leadership changes in the IB. In June 2005, P Wuffli, the then Group CEO recommended to the BoD that H Jenkins succeed J Costas as IB CEO and the BoD approved this appointment on 29 June 2005, effective from 1 July 2005. S Bunce was also recommended to become IB Head of Fixed Income, replacing M Hutchins.

Shortly after his appointment, H Jenkins commissioned external consultants to undertake a review of strategic initiatives for the IB. The resulting findings suggested a need to focus on a number of areas, including emerging markets, commodities, delivery of IB products to WM businesses, and streamlining of risk processes. These were presented at an IB Management Committee ("**IB MC**") meeting in September 2005, where it was recommended that the IB must grow significantly to avoid falling behind competition.

At the same time, the IB also undertook a specific review of the Fixed Income business in conjunction with external consultants. It was recognized in 2005 that, of all the businesses conducted by the IB, the biggest competitive gap was in Fixed Income, and that UBS's Fixed Income positioning had declined vis-à-vis leading competitors since 2002. In particular, the IB's Fixed Income, Rates & Currencies ("**FIRC**") revenues decreased since 2004, and accordingly, FIRC moved down in competitor league tables by revenue. According to an external consultant, the IB Fixed Income business grew its revenue at a slower rate than its peers.

The external consultant compared the gap between UBS and the composite leader (defined as top 3 in a specific product area) in various fixed income products and concluded that the

IB had gaps in the Credit, Securitized Products and Commodities businesses, with smaller gaps in Rates and Emerging Markets.

The consultant also noted that strategic and tactical initiatives were required to address these gaps and recommended that UBS selectively invest in developing certain areas of its business to close key product gaps, including in Credit, Rates, MBS Subprime and Adjustable Rate Mortgage products ("**ARMs**"), Commodities and Emerging Markets. ABS, MBS, and ARMs (in each case including underlying assets of Subprime nature) were specifically identified as significant revenue growth opportunities. The consultant's review did not consider the risk capacity (e.g. stress risk and market risk) associated with the recommended product expansion.

In March 2006, the IB presented its Fixed Income growth strategy to the GEB. The key growth initiatives noted in the presentation included:

- Emerging Markets – expand fixed income capability in emerging markets countries focusing on Brazil, Russia, India, China, and Mexico;
- Commodities – expand commodities business globally;
- Securitized Products – build out a new Securitized Products Group, including a Commercial Real Estate Capital Markets group and proprietary trading desk;
- High Yield – expand Global Structured Finance and High Yield Loan Capital Markets business;
- Structured Credit – expand investment grade structured credit and trading businesses;
- Expand businesses and local markets presence in APAC region; and
- Expand municipal securitization, derivatives and proprietary trading businesses.

4. How the Losses Developed

4.1 Dillon Read Capital Management (until re-integration into UBS)

On establishment, and following the transfer of the IB's PFCA, MOSG and CRE businesses into DRCM, DRCM operated a number of trading strategies that involved Subprime positions. All of these strategies were previously conducted within the IB. In brief, the most significant DRCM trading strategies relevant to this Shareholder Report were as follows:

ABS Relative Value – This strategy involved the trading of perceived mispriced instruments, both long and short, against other instruments. Within the home equity book, the desk purchased ABS securities collateralized by Subprime and Alt-A mortgages, both 1st and 2nd liens, and Net Interest Margin certificates ("**NIM**") at all credit quality levels. The desk also executed Credit Default Swaps ("**CDS**") on ABS referencing the ABX and single-name exposures as well as spreadlocks to express both long and short views in these market segments.

DRCM took write-downs on the ABS Relative Value strategy's home equity book in Q1 2007, in relation to ABS tranches and NIMs. These occurred substantially in the lower credit quality ABS and NIMs (i.e. rated BB+ and below), and on 2006 vintages with 2nd lien bonds. The home equity book had taken a net short position on Subprime exposure since September 2006. Short positions in CDS on single ABS, spreadlocks and on the ABX were not considered to be hedges by the DRCM traders, but rather distinct shorting of perceived over-priced assets.

Reference Linked Notes – DRCM's RLN desk purchased a pool of assets, including ABS, based on a long-term buy-and-hold strategy (though assets could be risk managed and replaced as part of DRCM's right to manage the reference pool of assets). The desk also purchased credit protection in the form of RLNs marketed and sold to investors. The assets in the pool could be a combination of cash and synthetic instruments. DRCM received the income from the assets held in the pool, and paid investors a premium for credit protection. DRCM purchased different amounts of protection; the lowest amount of protection purchased in any RLN issuance was on 5.5% of the pool, while the highest amount was approximately 45%. In some cases, based on investor demands, the RLN holders bore the first-loss risk, while in other cases UBS held equity (and thus bore the first-loss risk).

Over the course of several weeks around late July 2007, the value of Subprime assets in various RLN deals declined, and the value of protection on those deals was exhausted. The assets could not be sold given the illiquidity in the market and UBS was exposed to further deterioration.

ABS CDO Trading – DRCM's ABS and CDO Trading desk accumulated and repackaged CDOs and identified opportunistic situations in the CDO market where the desk served as a bidder of last resort by placing a (low) bid for the equity portion of a rated CDO. The desk also provided a CDO Warehouse facility to clients, building up underlying assets on their clients' behalf. The assets were then passed to an agent for repackaging and issuance.

US Short Term Asset Backed Portfolio – This DRCM desk invested in AAA rated short term instruments as part of investing DRCM's spare liquidity to obtain a positive carry (since the (expected) yield on these positions exceeded the internal cost of funding and the hedging costs).

Losses on the DRCM trading strategies described above contributed approximately 16 % of the Subprime Losses as at 31 December 2007.

4.2 UBS Investment Bank: Fixed Income

4.2.1 Overview

The primary contributor to UBS's write-downs in the IB was the CDO desk within the IB's Fixed Income business. As at 31 December 2007, approximately two thirds of the total UBS losses were attributable to the CDO desk.

The CDO desk entered into transactions related to US Subprime residential mortgages principally through CDO securitization and through the purchase or retention of CDO Super Senior positions.

In percentage terms, both resources and profits on this desk increased significantly year on year from 2005 to 2006.

4.2.2 Development of the CDO Warehouse

UBS acquired its exposure to CDO Warehouse positions through its CDO origination and underwriting business.

In the initial stage of a CDO securitization, the desk would typically enter into an agreement with a collateral manager. UBS sourced residential mortgage backed securities ("**RMBS**") and other securities on behalf of the manager. These positions were held in a CDO Warehouse in anticipation of securitization into CDOs. Generally, while in the Warehouse, these positions would be on UBS's books with exposure to market risk. Upon completion of the Warehouse, the securities were transferred to a CDO special-purpose vehicle, and structured into tranches. The CDO desk received structuring fees on the notional value of the deal, and focused on Mezzanine ("**Mezz**") CDOs, which generated fees of approximately 125 to 150 bp (compared with high-grade CDOs, which generated fees of approximately 30 to 50 bp). Key to the growth of the CDO structuring business was the development of the credit default swap ("**CDS**") on ABS in June 2005 (when ISDA published its CDS on ABS credit definitions). This permitted simple referencing of ABS through a CDS. Prior to this, cash ABS had to be sourced for inclusion in the CDO Warehouse.

Under normal market conditions, there would be a rise and fall in positions held in the CDO Warehouse line as assets were accumulated ("ramped up") and then sold as CDOs. There was typically a lag of between 1 and 4 months between initial agreement with a collateral manager to buy assets, and the full ramping of a CDO Warehouse.

The CDO Warehouse was a significant contributor to Value at Risk ("**VaR**") and Stress limits applicable to this business relative to other parts of the CDO securitization process and warehoused collateral was identified as one of the main sources of market risk in reviews by IB Market Risk Control ("**MRC**") conducted in Q4 2005 and again in Q3 2006.

Throughout 2006 and 2007, there were no aggregate notional limits on the sum of the CDO Warehouse pipeline and retained pipeline positions. Instead, these positions were subject to Stress and the overall Mortgage US VaR limits. In addition, each warehouse deal required approval by control functions through the IB's "Transaction Requiring Prior Approval" ("**TRPA**") process. All warehouse deals were subject to, and approved through, the IB's TRPA approval process.

By the end of 2007, losses on the positions held in the CDO Warehouse plus retained pipeline positions represented approximately one quarter of the CDO desk's losses (i.e. approximately 16% of UBS's total Subprime Losses as at 31 December 2007).

4.2.3 Super Senior Positions – Retention and Hedging

Following completion of the CDO securitization process, UBS generally sold subordinate (i.e. lower rated) CDO tranches to external investors. In 2005, the CDO desk also sold the highest rated / AAA rated (the so called "**Super Senior**") tranches of these CDOs to third party investors along with subordinate tranches. However, after the first few deals, the IB retained the Super Senior tranche of CDOs it structured on its own books. One factor influencing this change was that the CDO desk viewed retaining the Super Senior tranche of CDOs as an attractive source of profit, with the funded positions yielding a positive carry (i.e. return) above the internal UBS funding rate and the unfunded positions generating a positive spread. Further, within the CDO desk, the ability to retain these tranches was seen as a part of the overall CDO business, providing assistance to the structuring business more generally. Apart from the Super Senior positions retained by the CDO desk from its CDO structuring activities, the desk also purchased Super Senior positions from third parties to be hedged and held on UBS's books.

Losses on the Super Senior positions contributed approximately three quarters of the CDO desk's total losses (or 50% of UBS's total losses) as at 31 December 2007. Within this aggregate position, there are three different categories of Super Senior positions to consider: Negative Basis Super Seniors, AMPS Super Seniors, and Unhedged Super Senior positions:

- Negative Basis Super Seniors: these were Super Senior positions where the risk of loss was hedged through so-called Negative Basis (or "**NegBasis**") trades where a counterparty, such as a monoline insurer provided 100% loss protection. The hedge resulted in a credit exposure towards the protection seller. As at the end of 2007, write-downs on these positions represented approximately 10% of the total Super Senior losses.

- Amplified Mortgage Portfolio ("**AMPS**") Super Seniors: these were Super Senior positions where the risk of loss was initially hedged through the purchase of protection on a proportion of the nominal position (typically between 2% and 4% though sometimes more). This level of hedging was based on statistical analyses of historical price movements that indicated that such protection was sufficient to protect UBS from any losses on the position. Much of the AMPS protection has now been exhausted, leaving UBS exposed to write-downs on losses to the extent they exceed the protection purchased. As at the end of 2007, losses on these trades contributed approximately 63% of total Super Senior losses.

- Unhedged Super Senior positions: positions retained by UBS, in anticipation of executing AMPS trades which did not materialise. As at the end of 2007, losses on these trades contributed approximately 27% of total Super Senior losses.

The Super Senior inventory of UBS grew from low levels in February 2006 to approximately USD 50 bn by September 2007 of which USD 27 bn related to AMPS and unhedged Super Seniors (mainly including the Mezz ABS CDO inventory). In relation to timing, and as noted at section 4.2.2, a time lag existed (typically of 1 to 4 months) between entering into an agreement with a collateral manager and completing the CDO Warehouse. A further time lag existed between completing the Warehouse, retaining the Super Senior tranche and executing a hedging AMPS trade.

Key drivers of the growth of the Super Senior inventory included:

- Increasing use by the CDO desk of hybrid CDO issuance, both in number and size of deals - more than 75% of total CDOs were hybrids (hybrid CDOs are backed by a combination of cash and synthetic assets);
- Increasing volumes of Variable Funding Note ("**VFN**") Super Seniors. The VFN Super Seniors did not require up-front UBS funding, and only the replacement value showed on the UBS balance sheet; and
- Growth in the AMPS business. A hedging methodology enabled the desk to buy relatively low levels of market loss protection (generally 2 to 4% and sometimes more), and the desk considered the position as fully hedged. All AMPS trades except for one were made before July 2007.

Of the total USD 50 bn Super Seniors held by UBS, UBS purchased USD 20.8 bn of these Super Seniors from third parties. USD 15 bn of this was fully hedged (NegBasis Super Seniors), and the remaining USD 5.8 bn was partially hedged (AMPS).

4.2.4 Other Fixed Income Businesses – Securitized Product Group Proprietary Trading Desk and Credit Fixed Income

The other areas of IB's Fixed Income business contributing to the Subprime write-downs included the SPG Proprietary Trading desk created at the start of 2006 and the IB CFI business.

SPG's proprietary trading strategies included:

- Short-Term Subprime RMBS – effectively a carry strategy with opportunistic selling, borrowing funds at the UBS cost of funding, and investing long in AAA-rated, short-duration Subprime home equity bonds;
- Residential Credit – the residential credit trading book was predominantly made up of prime and Alt-A bonds, with some limited Subprime positions; and
- Secondary Market CDO Trading – this strategy involved shorting ABX and TABX indices, and taking long positions in AAA CDO bonds.

Prior to the re-integration of DRCM, SPG did not have significant Subprime exposure apart from its Short-Term Subprime RMBS book, generally made up of AAA-rated short-duration bonds. The Short-Term book reached a maximum size of approximately USD 3bn.

In addition to its own Subprime RMBS positions, SPG inherited the majority of DRCM's Subprime positions, amounting to approximately USD 20 bn in Q2 2007. When the DRCM positions were migrated to SPG, in Q2 2007, ABX hedges were executed to offset part of the risk and SPG also sold part of the legacy DRCM bonds in the US Short Term Asset Backed Portfolio.

As at 31 December 2007, write-downs attributable to the SPG business (excluding legacy DRCM positions) represented approximately 1.5% of UBS's overall losses.

In 2006 and 2007, CFI had comparatively small Subprime exposures in its credit and structured credit businesses. As at 31 December 2007, estimated Subprime losses within CFI contributed less than 1% of total losses.

4.3 UBS Investment Bank: Foreign Exchange / Cash Collateral Trading

Under the arrangements described in section 5.8 of this report, IB's FX/CCT business has overall responsibility for (i) funding UBS's balance sheet, (ii) providing a central treasury function for all BGs within the UBS Group and (iii) facilitating a single point of entry into the short term wholesale cash markets. In connection with this role, FX/CCT manages UBS's daily liquidity strategy. The ABS Trading Portfolio is one part of the RVT Portfolio managed by FX/CCT within this role. The RVT Portfolio is a proprietary portfolio that historically invested in AAA-rated government and corporate bonds. The primary purpose of the RVT Portfolio (including therefore the ABS Trading Portfolio) was to act as a liquidity buffer or reserve for the UBS Group generally.

The ABS Trading Portfolio consisted of AAA- and AA-rated ABS, referencing as underlying assets car leasing, credit card, commercial and residential mortgages and student loans. There was a heavy bias towards US underlying assets, reflecting a general bias in the market and also reflecting that many of these assets were pledgeable with central banks (especially the US Federal Reserve). Since establishment in late 2002 / early 2003, the ABS Trading Portfolio was of a value of between USD 25 bn and USD 30 bn. In Q3 2007 it was liquidated (as far as possible) as part of the liquidation of the RVT Portfolio more generally to create liquidity in response to the dislocation of the credit markets in August. Losses from the RVT Portfolio (primarily attributable to the ABS Trading Portfolio) in 2007 contributed approximately 10% of the total UBS losses.

UBS created the ABS Trading Portfolio in late 2002 / early 2003 after Credit Risk Control ("**CRC**") downgraded its country rating for Japan. This meant that FX/CCT had to reduce its then substantial holding of Japanese Government Bonds ("**JGB**"). Because FX/CCT retained the same level of funding liabilities and an unchanged revenue budget, it proposed to build up a portfolio of US ABS. In order for the assets to be a suitable replacement for the holdings of JGB that were to be liquidated, any replacement securities had to be:

- REPO-able;
- Highly rated – i.e. AA or AAA;
- Capable of being pledged to (one or more of) the primary Central Banks as collateral for UBS's own borrowings; and
- Capable of being sold in the short term.

There were also a number of other advantages of ABS perceived at the time, including small spreads, USD denomination and no interest rate dependencies (floating rate instruments only in the portfolio). Because they had a higher yield (e.g. than government bonds), including ABS in the RVT Portfolio meant that there was no negative carry trade in the RVT Portfolio.

5. Risk Management and Risk Control Activities

5.1 Overview

The UBS Risk Management & Control Principles set out the overall responsibility for risk management and the risk control framework for the UBS Group. A summary of its five principles is set out below:

- Business management accountability: BG management "owns the risks" and is responsible for risk management ensuring that risk and return are appropriately balanced;
- Independent controls: Control units provide independent checks on risk taking activities and focus specifically on preserving the long term interests of UBS;
- Risk disclosure: Timely and transparent disclosure of risks and related P&L;
- Earnings protection: Protecting UBS's earnings from unacceptable damage; and
- Reputation protection: Safeguarding UBS's reputation.

The Risk Management & Control Principles make it clear that business management is accountable for, and is expected to manage, all risks arising from their business and function and to ensure that risk and profit objectives are balanced. The identification of business risks associated with a business strategy is the responsibility of business Senior Management. The principles explicitly state that the existence of an independent risk control function does not absolve management from its responsibility to manage all risks arising in their business and function.

In this section of the Shareholder Report, UBS presents the wider findings in relation to the implementation of the principles of UBS risk management and control framework with respect to the particular businesses considered at section 4 above. This section of the Report also considers both the Market Risk and Credit Risk frameworks, with particular emphasis on the Market Risk framework, as well as findings in relation to the role and activities of the Finance function. UBS also considers the role of Group Treasury and specifically the impact of the historic UBS funding framework and approach to balance sheet management.

5.2 Risk Management

5.2.1 Risk Management in DRCM

As noted in section 3.2 above, the establishment of DRCM proved more complex than expected and required considerable effort across a range of logistics and control functions. Whilst the delayed launch of DRCM took place in June 2006 (for the CFC) and November 2006 (for the OIF), by the start of 2007 issues regarding the performance of DRCM were being raised internally. IB expressed dissatisfaction with the investment performance, and Global AM was disappointed with the level of third party assets raised in the OIF, and more generally concerned as to the complexity and associated risk of the operational model.

In mid-March 2007, DRCM management advised the Group CRO that DRCM had to mark down various Subprime positions, and in late March, DRCM advised that losses had increased.

Internal discussion, analysis and review followed, and at the end of April 2007, the BoD decided to close DRCM and to reintegrate the investment strategies within IB. UBS announced this decision on 3 May 2007.

Group Internal Audit ("**GIA**") undertook a specific review of DRCM in response to the early losses it incurred. This review highlighted that (i) improvements were required in analyzing, measuring and reporting risks inherent in Subprime-related activities, and (ii) valuation uncertainties in both IB and DRCM portfolios were not sufficiently transparent and inherent risks not adequately analyzed.

UBS also undertook an internal analysis and review of DRCM generally. This identified concerns regarding the lack of a comprehensive business case / plan; the complexity and cost of the business model adopted; a number of cultural issues; and financial performance being out of line with the (limited) prior assessment conducted before establishment. There was no indication that any of the losses at DRCM were the result of any breach of UBS's internal rules or regulations.

5.2.2 Risk Management on the CDO Desk

As described in section 4.2, the CDO desk business grew substantially in 2006. In March 2007 and in response to direct questions from the GEB Risk Subcommittee ("**GRSC**"), the CDO desk gave an update on UBS's potential Subprime exposure. The GRSC is responsible for the preparation of the decisions of the GEB in relation to the GEB's role as a risk council for the UBS Group.

The desk presented a relatively pessimistic view on certain aspects of the Subprime market and advised that UBS was suffering along with other players and the inventory was challenging. However, the desk noted that the gross exposure on loans awaiting securitization had been reduced and protection had been bought on indices, so the widening of spreads at the time was beneficial. On this basis, the desk believed that UBS would be generally better positioned than many of its peers because the pipeline was relatively small and there were relatively small residual positions.

Notwithstanding this outlook, in late May 2007, the CDO desk presented proposals for limit increases in relation to Negative Basis, Super Senior VFN and AMPS trades. Due to the market deterioration the proposals were not pursued.

Exit strategies contemplated by the CDO desk for the Super Senior positions included:

- Sales of long positions;
- Purchase of further first-loss protection for particular Super Seniors; and
- Purchase of macro protection, such as shorting the ABX index.

However, from July / August 2007, these strategies were not readily available, principally due to absence of counterparties willing to execute at prices that were mutually acceptable to both UBS and the counterparties.

5.2.3 Risk Management on the ABS Trading Portfolio

UBS did not identify any substantive reassessment of the ABS Trading Portfolio in light of wider market developments before difficulties were experienced in valuing certain investments in the portfolio for the July 2007 month end (which also coincided with the onset of the liquidity crisis). As a result, no significant measures were taken to reduce ABS exposures in this portfolio prior to that time, other than the trading desk starting to trade the ABX index from early 2007. In practice this did act as a hedge to some of the positions, although the ABX trading proposal was submitted as a profit making opportunity.

The desk responsible for this portfolio also made a proposal to increase ABS limits substantially in Q2 2007 so as to have greater flexibility within the overall RVT portfolio. The proposal was declined by the risk control functions.

5.3 Risk Control – Market Risk and Credit Risk

5.3.1 Overall Approach

UBS's Market Risk framework relies upon VaR and Stress Loss to set and monitor market risks at a portfolio level. Concentration is captured by Risk Factor Loss ("**RFL**") measures, Issuer Risk (exposure to individual or related entities) and Operational Limits. Within the Credit Risk Framework limits and monitoring are undertaken across a number of dimensions including portfolios (country ratings and sectors), business types of products and counterparty types.

UBS's Risk Authorities and Risk Management and Control Framework set out the risk authorities at different levels within UBS. While the ChO and the GEB have ultimate risk control authority, under the terms of the Organizational Regulations that authority has been delegated down in part to key position holders at Group level and within the IB such as the Group CRO and the Group Head of Market Risk ("**GHMR**") and the Group Chief Credit Officer ("**Group CCO**"); subject in each case to express limits.

During the period considered (2006 / 2007), the largest part of the overall Group VaR limit was allocated to the IB. Similarly, the major share in the overall Group Stress Loss limit was allocated to the IB. These limits were largely unchanged in the period until both the IB's VaR and the Stress Loss limit were reduced in response to market conditions in Q3 2007.

Within the IB, VaR limits are further allocated to business areas (e.g. Equities, Fixed Income), to businesses (e.g. Credit Fixed Income, Rates, MCC) and business lines (e.g. Mortgages US, FX/CCT Relative Value etc.). Stress limits are not allocated beyond business area level. These allocations are endorsed by the UBS IB Risk & Governance Committee ("**IB R&GC**") and submitted to the Group CRO for approval.

The IB also sets RFL limits which are approved by the IB R&GC and subject to ultimate approval by the Group CRO and the IB CRO. These are designed to limit concentrations of exposures to certain broad risk types such as currencies, particular credit spreads (corporates, ABS) etc. and may be set to include rates or prices or foreign exchange.

Whilst there were a number of credit spread RFL limits in place, there was no RFL that specifically addressed certain factors relevant to Subprime exposure, such as delinquency rates or residential real estate price developments.

Additionally, Operational Limits may be set for risks not otherwise adequately captured by VaR or if the IB R&GC considers such a limit appropriate and / or required by regulators. The Group CRO must approve Operational Limits in relation to material risks. The IB implemented many Operational Limits to build on the VaR, Stress and Risk Factor Loss limits and a number of relevant Operational Limits existed relevant to the businesses that suffered losses. These included:

- An umbrella aggregate operational limit for Subprime securities and loans covering the MOSG business in DRCM and the RMBS Warehouse in US mortgages;
- Operational Limits on Negative Basis cash and Super Senior VFN business; and
- Operational Limits on the ABS Trading Portfolio for different ABS sectors and issuer limits in this portfolio to mitigate concentration risk.

There were not however any Operational Limits on the CDO Warehouse, nor was there an umbrella Operational Limit across the IB (or the combination of IB and DRCM) that limited overall exposure to the Subprime sector (securities, derivatives and loans).

5.3.2 Application of Overall Approach to the Write-Down Affected Businesses

Based on the above described general approach, we note the following specific points in relation to Market Risk and Credit Risk controls around the write-down affected businesses:

The DRCM businesses were subject (in the case of the CFCs) to risk control within the IB framework and therefore many of the specific comments made in relation to the IB Rates business below apply equally to DRCM.

In the context of the CDO structuring business and Negative Basis and AMPS trades, IB MRC relied primarily upon VaR and Stress limits and monitoring to provide risk control for the CDO desk. As noted above, there were no Operational limits on the CDO Warehouse and throughout 2006 and 2007, there were no notional limits on the retention of unhedged Super Senior positions and AMPS Super Senior positions, or the CDO Warehouse (although approval of warehouse deals by MRC and other control functions was required through the TRPA process – see section 5.3.4).

MRC VaR methodologies relied on the AAA rating of the Super Senior positions. The AAA rating determined the relevant product-type time series to be used in calculating VaR. In turn, the product-type time series determined the volatility sensitivities to be applied to Super Senior positions. Until Q3 2007, the 5-year time series had demonstrated very low levels of volatility sensitivities. As a consequence, even unhedged Super Senior positions contributed little to VaR utilisation.

In monitoring and reporting positions, MRC took data feeds from the front-office systems. In analyzing the retained positions, MRC generally did not "look through" the CDO structure to analyse the risks of the underlying collateral. In addition, the CDO desk does not appear to have conducted such "look through" analysis and the static data maintained in the front-office systems did not capture several important dimensions of the underlying collateral types. For example, the static data did not capture FICO scores, 1st / 2nd lien status, collateral vintage (which term relates to the year in which the assets backing the securities had been sourced), and did not distinguish a CDO from an ABS. MRC did not examine or analyze such information on a regular or systematic basis.

With reference to CRC, in the context of the CDO desk and the Super Senior positions specifically, CRC had three particular responsibilities:

- Along with other control functions, involvement in approval of New Business Initiatives ("**NBIs**") for Negative Basis and Super Senior VFN business and TRPAs for CDOs and AMPS trades;
- Monitoring limits for counterparties of Negative Basis trades; and
- Approval by the Group CCO of non-standard tenors.

In the context of the FX/CCT ABS Trading Portfolio, Operational and notional limits applied to the portfolio at all times (including sector limits and issuer limits intended to reduce concentration risk). Both IB Business Unit Control ("**BUC**") and IB Risk Control appear to have had few concerns historically regarding the ABS Trading Portfolio. The portfolio was seen as straightforward, with few transactions and no issues in price testing or valuation prior to the July 2007 month end. Similar to the CDO desks approach, representatives of Risk Control, BUC and FX/CCT management involved with the ABS Trading Portfolio have noted that with the benefit of hindsight, granularity of data regarding particular investments beyond looking at rating etc. might have been appropriate. Enhancements were made to systems to facilitate modelling of this portfolio by individual instrument characteristics beyond rating – but these came into effect only as the liquidity crisis began.

5.3.3 Risk Reporting

There were many formal reports both within the IB and at Group level which sought to present a portfolio view of UBS's risks, including reports that sought to capture real estate securities and loan exposure. However, there was no comprehensive view available of the gross notional holdings with Subprime exposure across the IB. This was principally due to incomplete data capture and the effects of hedging. Hedging resulted in positions being netted off and therefore not showing up in the overall position data.

UBS's analysis of the various real estate reports revealed that with one exception the projected Stress Loss numbers for US real estate outlined in these reports were relatively modest prior to the onset of the liquidity crisis. In the case of the exception, the projected Stress loss was still a small fraction of UBS's write-downs and the relevant report was not widely distributed outside the Risk function and evaluated the impact of a decline in housing across the broader portfolio (i.e. not just real estate-related securities).

5.3.4 NBI and TRPA Processes

The NBI and TRPA processes are intended to ensure that the right level of control function oversight is applied to significant business initiatives and transactions in UBS. Both processes are intended to involve a broad, holistic risk assessment. Amongst other things, they are used to determine the need for and nature and level of relevant limits and other controls to be applied to the business / transaction in question.

The business did not submit NBI requests for either the CDO structuring business or for the AMPS business and there were no overall notional portfolio limits established for CDOs or AMPS. CDO and AMPS deals were approved on a transaction-by-transaction basis, using the TRPA process. Both the Negative Basis and Super Senior VFN deals were approved under the IB's NBI process. The retention of unhedged Super Senior positions was not subject to a specific approval process.

From an overall process perspective, concerns were raised in relation to the effectiveness of both the IB's TRPA and NBI processes. These discussions took place at the business level, for instance, within the IB Fixed Income Executive Committee, the IB MC as well as the IB R&GC. However, the questions concerning these processes during the course of 2006 and the first half of 2007 were not addressed and no significant changes were made in that period to the processes other than to establish a streamlined process for CDOs (authorized in December 2006). Under this process, any risk position taken in anticipation of a CDO transaction that was an otherwise permissible trading position (i.e. within established market risk limits) did not require a TRPA review (although other control functions (such as Accounting Policy and BUC) were provided with information concerning the transaction prior to execution). This streamlining of the process was supported by business and approved by control functions. However, CRC's approval of the hedge counterparty providing the protection was required in every case.

The creation of the FX/CCT ABS Trading Portfolio was approved in the IB's NBI process in December 2002. The portfolio did not change significantly since inception. In 2003, an NBI was approved to add non-USD denominated ABS and, in 2007, approval was given (again via an NBI) to start to trade the ABX index.

5.4 Risk Control – Finance

Under UBS's policy, traders are responsible for determining the fair value of their positions on a daily basis. Independent verification of the desks' valuation marks determined for the positions is performed by BUC, an organisational unit within the IB Finance function. BUC (and IB Accounting Policy) were also involved in the review of relevant NBI and TRPA requests (including the TRPA proposals for each CDO and AMPS trade).

Both the Group and the IB maintain valuation policies. These policies are derived from applicable accounting standards and provide a framework supporting the principal accounting and valuation determinations such as P&L recognition, whether and how to apply fair value accounting to positions, and consideration of, and basis for, fair value adjustments.

For many Subprime positions, the valuation methodology was mark-to-market. In the absence of quoted prices reference was made to equivalent securities (based on both primary and secondary issues).

At the start of September 2007, UBS determined to adopt a "Fundamental Model" approach to valuing certain positions. This approach was based on published research by UBS's Fixed Income Research Group. The Fundamental Model adopted an approach to valuing Subprime securities based on the cash flows expected from the mortgages underlying the RMBS and the remittance data on delinquencies on that cash flow and was subsequently refined in response to market developments and wider market practice.

In the relevant time periods, BUC operated a programme of formal monthly / quarterly valuation reporting which rolled up from desk to BG level. These covered a range of matters, including independent price verification results, valuation adjustments, inventory ageing, and changes in model certification status. BUC shared its work with the relevant business areas and on a quarterly basis its work was reviewed at the Group Risk, Finance and Treasury Meeting, involving senior IB and Group Finance, Risk and Treasury personnel.

BUC evaluated whether Day 1 P&L could be recognised on trades. When model inputs were believed to be unobservable, BUC would conduct a stress test, shocking the parameters to a

99.5% confidence level. If this gave rise to movements of no more than 10%, it was deemed that such unobservable inputs were not material. If BUC experienced delays in conducting such sensitivity checks, then for that period any Day 1 P&L would be deferred. While in many cases confirmation of Day 1 P&L treatment was given within circa 1 month from execution, in several instances this determination was delayed. BUC explained that such delays have occurred for a number of reasons, including data issues and priorities changing in light of market developments.

All Super Senior positions were determined by BUC to be Day 1 P&L eligible at the time of acquisition by UBS. Additionally, both cash and derivative Super Senior positions were, at the time they were acquired by UBS, deemed to be held for trading, and marked to market. At the time they were acquired by UBS, all Super Senior positions were deemed to be Level 2 Assets. Following re-assessment in Q4 2007, all Super Senior positions are currently categorized as Level 3 Assets. No liquidity reserves were applied to Super Senior positions, although there were increases in retained inventory and potential limitations on sales to counterparties holding a credit rating of AA or better. This treatment was consistent with accounting standards and UBS policy.

The diminished market liquidity and transparency reported in February and March 2007 resulted in a substantial reduction in the coverage of independent price testing of Subprime securities, and BUC reported this fact to the Audit Committee in April 2007, together with its assessment of the principal valuation issues for UBS's mortgage securities. About this time, GIA noted that there was no policy in place with respect to either minimal independent price testing coverage or an escalation procedure for substantial positions that could not be independently tested.

Consistent with its accounting policy and standards, UBS did not take mark-to-market losses on warehouse positions if it was believed that the probability of securitizations was 90% or better. The question of whether to take mark-to-market losses on the CDO Warehouse securities was escalated by BUC / IB Finance to Group Accounting Policy in early April 2007 and the treatment was confirmed, as the trading desk confirmed that there was at least a 90% probability that the CDO securitizations would be completed. A securitization was priced in April with realized P&L seen as broadly in line.

In its 8 August 2007 presentation to the Audit Committee ("**AC**"), BUC set out the extent of untested positions for IB and in so doing described the retained Super Seniors (for example Negative Basis trades and AMPS trades) as net flat risk or low risk for valuation purposes, based on the views of the desk. BUC also stated in a footnote that a review had been initiated in Q2 2007 to test this view, but progress had been impeded by static data and mapping issues.

5.5 Risk Control – Group Internal Audit

GIA pursues its activities under a Charter for UBS Internal Audit, with the Head of GIA reporting to the Chairman of the BoD. GIA operates a clearly defined and consistently applied risk assessment and planning process – conducting a formal annual risk assessment in the second half of each year to determine plans for the following year. This risk assessment is conducted at both a macro and micro level. Based on the risk assessment process, an operational audit plan is prepared and submitted to the ChO for approval. GIA communicates planned audit objectives to the BoD and GEB and provide this information to the EBK and UBS's external auditor. GIA generally conducts over 250 reviews per year.

UBS believes that GIA's risk assessment work was comprehensive, included coverage of the various businesses with Subprime exposure, and that proposed relevant audit work was carried out in the period in line with agreed audit objectives. As part of this process, in 2006, GIA undertook eight reviews that are relevant to the subject matter of this Shareholder Report. Five were issued with "Satisfactory" ratings, two were issued with "Qualified" ratings (Rates, Derivatives, BUC and Model Development and Deployment controls), and one was an "Unrated" project review. The findings of eight reviews were issued in 2007, of which five were issued with "Satisfactory" ratings and three were issued with "Qualified" ratings (High Yield & Investment Grade Structured Credit Trading, New Business and TRPA processes and Sales and Trading Supervisory Procedures). The reports with "Qualified" ratings were submitted, in line with UBS internal procedures, to the ChO, relevant members of the GEB and Senior Management of the relevant BG. In each of their reviews, GIA identified and raised opportunities for improving processes and controls. Actions were agreed with relevant management and resolution was monitored by GIA in line with established processes.

5.6 Risk Control – External Audit

E&Y presented their 2006 Long Form Report at the 25 April 2007 Audit Committee meeting. E&Y noted that, apart from DRCM, there were no major issues relevant to the matters covered in this Shareholder Report.

At the same meeting, E&Y presented its results of their Q1 2007 review. This presentation, amongst other things, set out a summary of trading losses, challenges on various valuation issues and concluded that nothing had come to their attention to indicate that fair values at 31 March 2007 were inappropriate.

In early January 2007, E&Y produced a report based on their in-depth examination of the UBS Group Risk Reporting Process. The audit was performed in 2 phases: in phase 1, E&Y reviewed the organization, processes and controls at group level to ensure that risk information received from the BGs were promptly, completely and accurately reported in the Group Reporting. In phase 2, E&Y selected Leveraged Finance business and reviewed the credit risk reports of the business to ensure that adequate organization, processes and controls have been put in place to ensure that risks are promptly, accurately and completely reported in the Group Risk Reporting. Based on this work, in relation to Market and Credit Risk E&Y concluded that "the Group risk reporting processes were adequate to ensure that the key risks reported by the Business Groups were adequately included in the Group Risk Reporting", and that "the Group Risk Reporting processes were not complex in their execution and were performed by experienced professionals." In connection with its review of the UBS Group Risk Reporting process, which did not entail an audit of the underlying information coming from the business group to senior management, E&Y also noted that they did not encounter facts that would indicate that significant risks were not being reported in a prompt, complete and accurate manner to Group Senior Management.

5.7 Other Risk Control Aspects

UBS did not identify any whistle blowing cases that related to allegations of erroneous valuation or issues in any risk control functions that were relevant to the Subprime businesses. Prior to Q3 2007, there were no relevant category 1 or category 2 items reported via UBS's Sarbanes Oxley certification process or relevant issues of similar significance raised through the UBS Operational Risk framework.

5.8 UBS Funding Framework and Balance Sheet Considerations

5.8.1 Basis of Funding Arrangements

The governance framework for UBS's overall funding arrangements in effect during the period under review is long established and was approved by the GEB at the end of 2004.

Under this framework, Group Treasury is responsible for the management of UBS Group's financial resources and financial infrastructure and group level governance of treasury processes and transactions and the corresponding risk management. There is no specific policy governing balance sheet management and control in further detail, either at the UBS Group or the IB level. Also within this framework, IB's FX/CCT business managed day to day liquidity as required for the overall centralised funding framework and undertook operational management of the Group's cash and collateral; funded all cash positions of the UBS Group; planned liquidity and funding in day to day business; redistributed funds between BG and business units and was responsible for funds transfer pricing; maintained Central Bank facilities and collateral pledging; and maintained a portfolio of liquid assets that served as a liquidity buffer in a crisis scenario (including the ABS Trading Portfolio described at section 4.3 above).

The UBS Global Policy on Funds Transfer Pricing Methodology defines the conditions under which secured and unsecured cash is transferred between the BG. Under this Policy, FX/CCT is obliged to quote continuously an internal transfer price (bid / offer) for all transactions and for any maturity up to 10 years.

5.8.2 Internal Funding Terms

UBS, in pricing internal funding for the businesses, passed on its advantage in accessing funding in the market and the efficiencies provided by its centralised treasury and liquidity management process. This model resulted in significant funding being available to the businesses with prices within the ordinary external market spread (i.e. internal bid prices were always higher than the relevant London Inter-Bank Bid Rate (LIBID) and internal offer prices were always lower than relevant London Inter-Bank Offered Rate (LIBOR)).

Two further points should be noted on the funds pricing arrangements:

- The framework historically operated without any formal matching between the tenor of the funds provided to the relevant business and the nature or liquidity of the assets acquired; and
- Whilst assets that constituted eligible collateral e.g. for REPO purposes were financed on a secured basis, the internal funding model was asymmetric in nature. The business received better pricing if assets were eligible collateral (i.e. if secured funding was available) but did not suffer higher costs of funding if the assets held were not eligible collateral.

At all relevant times prior to the onset of the liquidity crunch, the businesses with Subprime exposure in the IB had access to funding on this basis.

The application of the funding framework to DRCM was the subject of substantial discussion prior to establishment of DRCM. It was ultimately agreed that UBS would provide USD 100 bn net balance sheet funding at UBS cost of funding (i.e. pricing as described above). Additionally however, the DRCM funding commitment was subject to a number of other terms including that 80% of the USD 100 bn should be secured via pledge and that DRCM manage the tenor of their funding and report utilization against agreed guidelines. As noted above, there were no such guidelines or requirements applicable to the IB businesses.

5.8.3 Development of UBS's Balance Sheet and Risk Weighted Assets

UBS regularly conducted comprehensive analyses of its balance sheet development (with detailed monthly and quarterly reporting to GEB and GRSC). Amongst other things, this reporting concerned the ongoing and continued growth in the overall balance sheet and RWA growth over time. The UBS balance sheet (total assets) grew by approximately 17% in both 2005 and 2006, and IB's share of the total balance sheet was always over 80%. That growth rate continued in the first half of 2007 and RWA grew at a commensurate rate throughout the period.

These developments were subject to Group Senior Management review and discussion. In late 2006, Group Treasury noted substantial balance sheet growth, that top quality collateral was reducing and that asset growth over the past 12 to 18 months was involving a build up in less liquid assets being funded mainly by unsecured liabilities with a lesser term. It was also noted that the high level of tradable assets included, amongst other things, the build out of the IB's ABS and MBS positions. At the time, it was suggested that imposing simple volume limits on balance sheet usage was not appropriate but it was agreed that additional analysis would be done. In this respect it should be noted that substantial Subprime Losses arose from activities that were either not reflected in the balance sheet at all or where balance sheet consumption was not significant. For example, whilst Super Senior and Negative Basis trades led to the holding of debt securities classified as trading assets carried at fair value, Super Senior VFNs were (at least initially) unfunded and required balance sheet usage only to the extent of their replacement value, which was, initially, zero.

The requested analysis was presented by Group Treasury to the GRSC in March 2007. At the time, Group Treasury discussed whether the cash capital position could turn negative and, amongst other measures, proposed a haircut funding model (with the result that liquid assets be funded by short term funding, whereas illiquid assets are funded by term money), a hard limit on IB illiquid assets and a freeze on IB's balance sheet. Whilst the haircut funding model was agreed, the proposed limits were not agreed by the then Group and IB CEOs. The Group Treasurer was asked to explore other options.

The ChO was updated on funding and liquidity issues in April 2007, at which time the ChO expressed concerns as to these issues. The then-Group CEO advised that he wanted to see how effective short term measures were before considering a general freeze in June / July. The ChO confirmed that it wished to be updated again in July / August, at which time they said it would consider illiquid asset caps in the IB.

In Q2 2007, the IB balance sheet continued to grow to a level of approximately CHF 2,500 bn (though the growth rate was slowing). At the same time, however the cash capital position deteriorated even as work continued between Group Treasury and the IB to decide how best to implement the haircut funding model that had been approved in March.

Shortly thereafter, the liquidity crisis in the wider market began. Actions taken in response resulted in:

- Imposition of hard balance sheet and RWA targets on the IB (necessitating asset reduction by the IB – with a focus on reducing illiquid assets);
- Implementation of the already approved haircut funding model;
- Implementation of a revised internal transfer price curve for the IB (increasing the relevant internal price for funds to the greater of UBS cost of funds and the adjusted average of a peer benchmark); and
- The creation of a segregated liquidity buffer.

6. Key Findings Relating to the Causes of the Losses

6.1 Implementation of Agreed UBS Growth Strategy

The overriding and consistent UBS strategy in the period was that of a global firm concentrating on three global core businesses – wealth management, asset management and investment banking and securities trading – as well as retail and corporate banking in Switzerland. One of the key strategic objectives was the integrated business model with a "one firm" approach which is designed to facilitate client referrals and the exchange of products and distribution services between businesses and as a result contributed to revenue flows.

During the period under review the UBS Group pursued a growth strategy, driven by organic growth and acquisitions. Within that overarching strategy, there were a number of sub-strategies / initiatives, including:

- Build-out of the IB's Fixed Income business: The Fixed Income growth strategy was presented to the GEB in March 2006. The GEB, while generally supportive, stressed that the increase in highly structured illiquid commitments that could result from this growth plan would need to be carefully analyzed and tightly controlled and an appropriate balance between incremental revenue and VaR / Stress Loss increase would need to be achieved to avoid undue dilution of return on risk performance.

- Expansion of UBS's alternative asset management business (i.e. including the establishment of DRCM): DRCM was established in line with agreed UBS Group strategic objectives, *inter alia*, to create a new alternative investment management business to meet client needs. The IB PFCA and CRE businesses were identified as attractive candidates (clients had expressed a desire to co-invest in the IB PFCA strategies).

Whilst UBS's review did not identify a fundamental flaw in relation to its objectives, in hindsight UBS believes that implementation of these particular growth initiatives as well as the level of challenge by Group and IB Senior Management on these initiatives was a contributing factor to the build up of UBS's Subprime positions which subsequently incurred losses.

UBS's retrospective review focused on root causes of these losses with the view toward improving UBS's processes. This Shareholder Report will first discuss the most significant causes or contributing factors specific to the Subprime Losses incurred by the individual businesses described in the preceding sections. Finally, UBS will present the most significant causes or contributing factors to the Subprime Losses that UBS believes are structural and thus relevant to more than one business or the UBS Group overall.

6.2 Causes Specific to the Individual Businesses

UBS's determination of the causes discussed below (and those discussed throughout this Shareholder Report and in the information reported to the EBK) is based on its retrospective review of relevant events and has been arrived at with the benefit of hindsight.

6.2.1 CDO Warehouse – Causes of Loss

- Fragmented approval structure: The CDO business model involved structuring a CDO for a manager and retaining as much as 60% of the capital structure on UBS's own books. The deal size would frequently be in excess of USD 1 bn. In other parts of the IB (or elsewhere in UBS) a commitment of that size would be subject to intensive management scrutiny, either in the form of a "Commitment Committee" or other express IB Senior Management approval. Membership of most Commitment Committees would normally comprise senior control function representatives, and frequently management representatives with a strong alignment to UBS's overall franchise. In relation to the CDO business, a fragmented approval process applied, rather than a commitment committee. On several occasions, requests for TRPA and Credit Risk approval of CDS with the CDO were presented to certain of the relevant authorities only after the warehouse was ramped, i.e., the majority of assets backing and to be sold to the CDO had already been acquired. A rejection at such point in time would have entailed expensive unwinding of the CDO Warehouse and deal (and was therefore unlikely). It appears that all requests for approval were granted. Further, CDOs were not subjected to commitment scrutiny prior to the agreement with a collateral manager, as would be the case with analogous commitments elsewhere in the bank, for example in IB's Debt Capital Markets business. Although there is no indication that the existence of the warehouse was determinative of the ultimate approval to go forward with the CDOs, it is possible that earlier consideration of whether the CDOs should have been undertaken might have led to a more robust analysis of the advisability of the transaction as a whole.

- Potential structuring / trading conflict: The CDO origination team and the CDO desk that purchased the Super Senior positions that were retained on UBS's books operated within the same reporting lines. UBS believes that this could have given rise to misincentives regarding investment strategy. While this potential was discussed at the GRSC in the first quarter 2007, no action was taken as the GRSC was assured that these potential conflicts were managed by having sufficient separation and senior oversight of the business.

- Absence of risk management: In Q2 2007, the CDO desk was giving a relatively pessimistic outlook in relation to certain aspects of the Subprime market generally in response to questions from Group and IB Senior Management about UBS's Subprime exposures. Notwithstanding this assessment, the MBS CDO business acquired further substantial Mezz RMBS holdings and the CDO desk prepared a paper to support the significant limit increase requests. The increase was ultimately not pursued.

- Lack of operational / notional limits: Throughout 2006 and until Q3 2007, there were no aggregate notional limits on the sum of the CDO warehouse pipeline and retained CDO pipeline positions – although warehouse collateral was identified as one of the main sources of market risk in reviews of the CDO Warehouse conducted by the IB MRC function in Q4 2005 and again in Q3 2006.

- Incomplete risk control methodologies: MRC placed considerable reliance upon VaR and Stress limits to control the risk of this business. The warehouse positions were subject to the overall Mortgage US VaR limit, and each Warehouse required approval by MRC and other control functions through the TRPA process. However, MRC did not implement additional risk methodologies or aggregate notional limits, even when losses were made in Q1 and Q2 2007 on retained securities in the CDO Warehouse (securities or tranches left over from previous securitizations). In addition, MRC supported a change in stress methodology in April 2007, which had the effect of enabling greater volumes of securities to be warehoused within existing overall stress limits.

- Funding framework: The UBS funding framework (for further details on this see section 5.8) facilitated relatively high levels of CDO warehouse activity, as the securities in the warehouse provided positive carry (until 2007, when market conditions generated increasingly large losses).

6.2.2 CDO Super Senior Positions – Causes of Loss

- NegBasis Super Seniors: The NegBasis Super Senior positions were fully hedged with highly rated (generally AAA-rated) counterparties (generally monoline insurance companies). There appears to have been no breakdown in CRC's setting and monitoring of counterparty limits. The losses sustained on these positions as at 31 December 2007 were the result of the significant widening of margins to monoline exposures in anticipation of the expected severe downgrades, and the financial difficulties encountered by one particular counterparty.

6.2.3 AMPS and Unhedged Super Seniors

- AMPS model: The AMPS model was certified by IB Quantitative Risk Control ("**QRC**"), but with the benefit of hindsight appears not to have been subject to sufficiently robust stress testing. Further, the CDO desk did not carry out sufficient fundamental analysis as market conditions deteriorated, or conduct 'look-through' analysis to re-assess potential issues in the AMPS structure or the underlying CDO structure. The cost of hedging through a NegBasis trade was approximately 11 bp, whereas the cost of hedging through an AMPS trade was approximately 5 – 6 bp. The reasons for the differential pricing of hedging strategies that from a risk metrics perspective were deemed equivalent appears not to have been closely scrutinised at desk or other levels.

- Funding framework: Several of the Super Senior positions (either retained from UBS CDO securitizations, or purchased from third parties) had thin positive carry of approximately 20 bp, i.e., the costs of funding the Super Senior positions were lower than the (expected) yield on these positions. More demanding internal transfer pricing requirements could have made several cash positions unattractive due to negative carry, which may have resulted in closer scrutiny of the overall carry strategy. It should be noted, however, that the unfunded Super Senior VFN positions would not have been constrained in the same way by more onerous funding requirements, as they required no initial funding, and only their mark-to-market (not nominal) values showed on the balance sheet (in RWA figures).

- Lack of monitoring / visibility: Once hedged, either through NegBasis or AMPS trades, the Super Senior positions were VaR and Stress Testing neutral (i.e., because they were treated as fully hedged, the Super Senior positions were netted to zero and therefore did not utilize VaR and Stress limits). The CDO desk considered a Super Senior hedged with 2% or more of AMPS protection to be fully hedged. In several MRC reports, the long and short positions were netted, and the inventory of Super Seniors was not shown, or was unclear. For AMPS trades, the zero VaR assumption subsequently proved to be incorrect as only a portion of the exposure was hedged as described in section 4.2.3, although it was believed at the time that such protection was sufficient. A consequence of this treatment was a lack of visibility to, and challenge of these positions by, Group and IB Senior Management.

- Lack of notional limits until Q3 2007: NegBasis trades were subject to notional limits, and underlying CDO trades were approved through the TRPA process. However, MRC did not set a notional limit for AMPS Super Seniors, or for the overall holdings of Super Seniors until Q3 2007.

- Absence of specific approval process for unhedged positions: Other than the general TRPA process for CDOs, there was no approval process or particular restriction on retaining or purchasing unhedged Super Senior positions (including unhedged positions acquired in anticipation of execution of AMPS hedges). The CDO desk did not submit an NBI request for the AMPS business, although in total eleven AMPS trades were executed.

- Incomplete capture of risk attributes by risk control: The risk reports for this business reported notionals (but after netting) and credit deltas. The presentation of the risk on a credit delta basis overlooked the fact that there was only 2-4% (sometimes more) protection on Mezzanine RMBS. MRC did not seek to expand the monitoring framework to capture other dimensions of the risk, such as gamma (i.e., the absolute change in the delta of an option when the price of the underlying asset moves).

6.2.4 Dillon Read Capital Management

The principal causes of loss in the respective DRCM trading strategies are identified below.

- RLN – Failure to mitigate fully the impact of a tail event: The RLN losses arose in the context of unprecedented liquidity conditions seen in August 2007. At circa 7% of the notional value of the global RLN program, which had been profitable since its launch in 1999, these losses are probably most appropriately viewed as the program experiencing a tail event.

- ABS / MBS Relative Value Trading losses: Insufficient accounting for the risk of divergent movements between previously correlated asset classes or instruments ("basis risk"): From Q2 2006, the relevant desk began purchasing ABS tranches with underlying 2nd lien mortgages of higher credit quality. While this was in response to increased credit concerns over Subprime ABS securities, write-downs were required in Q1 2007, and rose ultimately to USD 430 m (prior to transfer to IB). While DRCM's home equity linked trading book had been net short in Subprime exposure since September 2006, short positions in CDS on single ABS, spreadlocks and the ABX were investment grade as opposed to the substantial portion of below investment grade long positions.

- Insufficient attention to idiosyncratic risk factors (i.e., the risk of price change due to unique circumstances of a specific security, as opposed to the overall market): UBS believes that the ABS / MBS relative value trading losses arose from insufficient attention being paid to fundamental risk factors specific to the Subprime sector within DRCM's home equity-linked trading book (idiosyncratic risks – such as vintage, 1st / 2nd lien, etc.), and to basis risk errors made in hedging those positions. Risk management, risk control and valuation systems and data appear to have been lacking.

- ABS CDO Trading losses: The losses on this program were, in the context of the market dislocation, relatively limited.

- US Short Term Asset Backed Portfolio losses – Funding model and over-reliance on AAA ratings: The UBS funding model allowed carry trades to evolve using excess cheap liquidity. Losses are attributed mainly to over-reliance on the AAA rating of the portfolio securities that in retrospect did not perform in line with the rating.

6.2.5 FX/CCT ABS Trading Portfolio

- Lack of reaction to changing market: The various parties involved with the portfolio were aware of the content of the portfolio and the deterioration in the Subprime markets generally. However, those persons seem to have believed that there would not be an impact on the highly rated ABS in the portfolio. In addition, it seems that further comfort was taken from the continued acceptance of the respective assets as eligible collateral with the relevant Central Banks and the short term nature of the assets. Also, liquidity was generally assumed, even though trading activity in the ABS Trading Portfolio was relatively low.

- UBS's overall funding framework and approach to liquidity management: IB FX/CCT is a profit centre within IB – but was tasked to manage the Group's liquidity reserve. The IB preferred to have a positive carry trade in the portfolio. This was arguably an influencing factor in the decision to replace JGBs with ABS in 2002. There was no decision to forego some level of profit to ensure that the Group's liquidity reserve was fully capable of liquidation in any event and at any time. Rather there seems to have been an historic assumption that the portfolio would fulfil its need if and when required. Additionally, Group Treasury's direct involvement in the ABS Trading (or RVT Portfolio more generally) on a day to day basis seems to have been limited historically due to the long-standing delegation to IB FX/CCT of management of UBS's daily liquidity strategy.

- Incomplete risk control methodologies: There was considerable reliance on AA/AAA ratings and sector and concentration limits which did not take into account the fact that more than 95% of the ABS Trading Portfolio was referencing US underlying assets (i.e., mortgage loans, auto loans, credit card debts etc.).

- Lack of granular data: Neither risk management nor the control functions had readily accessible data upon which to perform fundamental analysis of the securities in the portfolio, for example vintage, 1st or 2nd lien or FICO score.

6.3 Overarching Causes

These overarching causes, like the causes discussed above and throughout this Shareholder Report and in the information reported to the EBK are based on UBS's retrospective review of relevant events and have been arrived at with the benefit of hindsight.

6.3.1 DRCM

DRCM accounted for approximately 16% of the Subprime Losses as at 31 December 2007. The broader relevance of DRCM to this Shareholder Report is as follows:

- Loss of senior Fixed Income risk management expertise in the IB: The creation of DRCM had a significant impact on the IB businesses and leadership, in particular as applied to Fixed Income. At the IB, there was a change in CEO and in Fixed Income leadership, and two key IB businesses (PFCA and CRE) were, from the IB's perspective, lost in the sense that considerable talents had moved from the IB to DRCM and were no longer available for the IB's own growth initiatives in that business field. The leadership changes also had an impact on the level of risk management expertise available at the IB, in particular as the IB's new leadership's acknowledged expertise was in sales and not trading (especially Fixed Income trading).

- Insufficient challenge of the business case and governance approach: The manner in which DRCM was established did not correctly weigh the strength of UBS as an organisation against the perceived importance, interests and demands of a few individuals, and allowed exceptional levels of autonomy within a complex and non-standard governance model.

- Distraction for Senior Management: Both the formation and dissolution of DRCM were highly distractive for Senior Management. This arose in two key ways. Firstly, DRCM's formation required the focus of IB Senior Management and therefore reduced their ability to attend to the ambitious growth plans of Fixed Income. Secondly, DRCM's dissolution absorbed considerable time of both Group and IB Senior Management at a critical point in the deterioration of the Subprime sector.

- Added growth pressure for IB Fixed Income: DRCM was not viewed as an outsourcing of IB's Fixed Income capability. Rather, the IB intended to grow its own Fixed Income business, notwithstanding the loss of PFCA, a major component in the creation of DRCM. This in turn added to the pressure to grow IB Fixed Income.

- DRCM's use of the IB's control framework and infrastructure platform: IB operational and logistics support and control oversight functions had to cover both the retained (and growing) IB Fixed Income business as well as the DRCM business (which was essentially a new business venture being built from scratch). Additionally, the ongoing discussions around establishment and implementation of the DRCM business and the complex issues it raised (e.g. a separate risk framework for the OIF and CFC) required substantial attention from members of IB, Global AM and Group Senior Management on an ongoing basis. Implementation of DRCM demanded substantially more resource commitment at all levels than was initially expected. These burdens played a role in reducing the ability of the control and logistics functions to investigate and respond to the exposures in the IB.

- Lack of full capitalization on the DRCM loss experience: It appears that although the DRCM losses were often in asset classes that were rated lower than Subprime positions in the IB, the closure of DRCM could have been a basis for a more comprehensive review and assessment of all Subprime positions in the IB, and for a review of UBS's risk assessment processes in connection with the same. While reviews for similar exposures within IB were initiated as a result of the DRCM losses, those reviews did not succeed in identifying the latent issues within, among other positions, the IB's substantial portfolio of retained CDO Super Senior tranches.

6.3.2 Fixed Income

- Growth orientation: The IB was focused on the maximization of revenue. There appears to have been a lack of challenge on the risk and reward to business area plans within the IB at a senior level. UBS's review suggests an asymmetric focus in IB Senior Management meetings on revenue and P&L, especially when compared to discussions of risk issues. Business-peer challenge was not a routine practice in those meetings.

- Lack of challenge within the IB to IB Fixed Income strategy: The review benchmarking UBS with peers that had been commissioned from an outside consultant, and the subsequent development and presentation of an ambitious Fixed Income growth strategy to the IB Management Committee and the GEB, were intent on closing perceived gaps to competitors, but apparently were not sufficiently challenged internally. In particular it seemed to be assumed that there were no infrastructure constraints that might affect implementation, that requisite skills existed or could be hired, or that there was no balance sheet utilization limit or other natural market barriers.

- Lack of recognition for required growth in supporting resources: There does not appear to have been investment in the type of control resources and infrastructure commensurate with the significant increases in volumes, revenues, and complexity of the Fixed Income strategic objectives. The systems infrastructure was not capable of capturing the complexities associated with some of the more complex Fixed Income products.

- Limited substantive off-cycle strategic re-assessment within the IB: Notwithstanding quarterly meetings held by IB Management, there does not appear to have taken place a significant (re)assessment (or resulting change) in IB strategy outside the routine annual process over the relevant period. This seems to contrast with peer investment banks who conducted reviews more frequently.

- Inappropriate risk metrics used in strategic planning and assessment: IB business planning relied on VaR, which appears as the key risk parameter in the planning process. When the market dislocation unfolded, it became apparent that this risk measure methodology had not appropriately captured the risk inherent in the businesses having Subprime exposures.

- Lack of hard limits on RWA / balance sheet usage: Coupled with the funding framework, this meant the IB was not incentivised in an appropriate way to assess and prioritise between businesses from a resource allocation perspective when setting strategy.

The discussion above focuses on IB. However, these points also reflect or raise questions about the wider strategy setting process for UBS Group as a whole.

6.3.3 Governance

UBS believes that the overall design of the UBS governance framework is appropriate and with clear allocation of responsibilities. As with the questions on strategy noted above, our review of the minutes of the relevant committees on the BoD, GEB and IB level lead us to the conclusion that the overriding issues relate principally to implementation and effectiveness.

6.3.3.1 Group Governance

In September 2006, Group Senior Management expressed general concerns about the US housing market within the GRSC. Further, from the time the first losses in DRCM became apparent in Q1 2007, the GRSC was alert to the issues associated with Subprime investments generally and keen to understand UBS's exposure to these markets. However, IB Senior Management only appreciated the severity of the problem in late July 2007. Consequently, only on 6 August 2007, when the relevant IB management made a presentation to the ChO, were the ChO and the CEO of UBS given a comprehensive picture of the exposures of UBS relating to their CDO Super Senior positions. UBS has identified a number of factors that appear to have detracted from the effectiveness of Group Senior Management's response to the Subprime situation.

- Failure to demand a holistic risk assessment: Whilst the Group Senior Management was alert to general issues concerning the deteriorating US housing market, they did not demand a holistic presentation of UBS's exposure to securities referencing US real estate assets before July 2007, even though such an assessment may have been warranted earlier in view of the size of UBS's real estate assets. Whilst attempts were made to understand the risks in the Subprime segment before that time, Risk Control and business management described substantial notional exposures in AAA-rated securities, limited exposures to lower rated instruments and low Stress Loss on the portfolio. Similarly, IB Senior Management assured Group Senior Management that the risks in the IB were well managed. It appears that the IB management did at no stage conduct a robust independent assessment of its overall Subprime exposures. Consequently, Group Senior Management relied on assurances of others rather than obtaining all of the facts and analytically reviewing the situation.

- Failure to manage the agenda: Prior to Q3 2007, discussions in relation to Subprime exposures were frequently one item in what were often extensive agendas of Group management committees. The review of these exposures was in contrast with the attention that Group Senior Management gave, for instance, to leveraged finance transactions which were subject to extensive debate and challenge with clear direction in relation to the Group's overall risk appetite. When the potential Subprime related issues were being discussed, on the other hand, the presentations made to Group Senior Management did not generate sufficiently well defined actions with hard deadlines and follow up.

- Lack of succession planning: On establishment of DRCM, leadership succession at the IB was identified on a reactive basis, rather than as a part of a wider and long standing succession planning arrangement.

6.3.3.2 Investment Bank Governance

The IB had many committees that had the mandate to review and discuss issues relevant to the businesses with exposure to the Subprime market. The overriding IB governance issue seems principally to be one of lack of effectiveness of these key committees. UBS believes that the most important factors that contributed to this are:

- Failure to demand a holistic risk assessment: It appears that the focus of the IB was revenue growth and filling the gap to competitors. This contrasts with the level of debate at the same time within relevant Group governance committees such as the GRSC.

- Failure to own the business: Members of the IB Senior Management apparently did not sufficiently challenge each other in relation to the development of their various businesses. The Fixed Income strategy does not appear to have been subject to critical challenge, for instance in view of the substantial investments in systems, people and financial resources that the growth plans entailed.

6.3.4 Funding Framework and Balance Sheet / RWA Management and Control

In retrospect, it appears that the UBS funding framework and related approach to balance sheet management were significant contributors to the creation of UBS's Subprime exposure generally for the following reasons:

6.3.4.1 Funding Framework

- Low cost of funding: Given the internal funding rates in the UBS Funds Pricing Policy as it existed at the relevant times, UBS's businesses generally were able to fund themselves internally at prices that were better than those available in the market.

- Lack of differentiation between liquid and illiquid assets / term funding: The internal funding framework as it operated pursuant to the Funds Pricing Policy did not create sufficient incentives for the businesses to match funding or to distinguish liquid and illiquid assets. Effectively, the full benefit of UBS's ability to obtain funding at a relatively low cost in the market was passed through to the business, without any adjustment to reflect the nature of the relevant business activity.

- Limited business sensitivity to funding issues: Coupled with the lack of hard limits on Balance Sheet usage / RWA, it appears that the funding framework created an environment in which significant levels of funding were available to the business generally. The Funds Pricing Policy made trades more profitable than they would otherwise have been as even investments in instruments generating small yields still were profitable. This incentivised carry trades generally across the IB.

- Resistance to change the funding framework: Whilst there was discussion in 2005 and the first half of 2006 on controls about the nature and tenor of funding for DRCM, no similar approach was considered for application to the IB (or more widely) until late 2006 / early 2007 when discussions at the Group Senior Management level culminated in the (in principle) approval of a haircut funding model by the GRSC in March 2007 and approval of a revised internal transfer price curve (implemented in November 2007).

  A number of IB businesses (including those generating Subprime Losses) grew in 2006 by creating portfolios with relatively low returns on assets. In hindsight, UBS believes that the implementation of a more stringent funding model for the IB could have resulted in different investment decisions by the IB. However, such a funding model was seen by IB Senior Management as potentially impacting their growth plans.

6.3.4.2 *Balance Sheet / RWA Management and Control – Findings*

- Lack of principles on Balance Sheet / RWA management and control: Whilst there is a long-established policy framework around treasury, funding and liquidity related matters, which complemented UBS's wider governance framework, there has not historically been an equally clearly articulated statement of UBS's key principles for balance sheet and RWA management and control.

- Ex-post review versus pre-agreed limits: There was regular, frequent and detailed reporting on balance sheet and other related developments, however, this was after the event. A proposal in early 2007 from Group Treasury to impose hard limits on IB balance sheet usage and illiquid asset positions to halt further growth was not agreed by the then Group and IB CEOs.

- Resistance to hard limits: The balance sheet size was not considered a limiting metric. Whilst there was regular reporting by Group Treasury on balance sheet development, there was no formal Asset & Liability Committee ("**ALCO**") to take decisions on balance sheet allocation until establishment of the IB ALCO in January 2007. This issue became more pronounced when liquidity deteriorated. In Q3 and Q4 2007, hard balance sheet limits and RWA targets for the IB were agreed and fixed (including for 2008). However such top down setting of hard limits did not take place previously.

- Business prioritisation: It appears that within IB the emphasis was on delivering growth, with the size of the balance sheet a second order issue. There was some communication within IB Senior Management to limit balance sheet growth, and also some concern expressed at Group level. However, there was continued growth in the IB balance sheet and RWA in Q1 and Q2 2007.

6.3.5 Risk Management

UBS has identified the following contributory causes in relation to risk management by the relevant businesses generally, including:

- Gaps in risk management expertise / experience at the IB Senior Business Management level: The successors of the departing top managers in IB appointed in July 2005 had strong sales and client attributes, but it appears that neither had strong risk management backgrounds. A senior risk manager in Fixed Income was not hired, even though this had been planned in 2006.

- Failure to respond to wider industry concerns: At the level of relevant business management, there appears not to have been sufficient discussion of or actions upon concerns surrounding Subprime as an asset class until Q3 2007, even though UBS's research team issued research reports on this area. This seems to have arisen largely from the belief that deterioration in the Subprime market would not impact AAA assets. For example, in March 2007, the Rates business gave a relatively pessimistic assessment of certain aspects of the Subprime market to Group Senior Management. However, over this period, CDO Warehouse activity continued and the CDO desk proposed increases in limits.

- Absence of Front-desk limit structure: Relevant IB business management do not appear to have imposed a framework of additional limits on the business under review beyond those set by risk control functions. Whilst it is noted that a threshold limit was imposed on Negative Basis trades, and that the NBIs for Negative Basis and Super Senior VFN entailed notional limits, the limits that bounded this business' activities appear to have largely been confined to those set by MRC or the requirement for transaction approval through TRPA. There is no indication that IB Senior Management seriously challenged the efficacy of pursuing this business in the face of increasing concern about the US housing market and specifically the Subprime sector.

- Lack of fundamental analysis, or to "look through" structures: In several of the relevant businesses, the CDO desk did not conduct significant fundamental analysis of underlying Subprime until Q3 2007.

6.3.6 Risk Control

The vast majority of positions that caused the Subprime Losses were monitored under and subject to the limit structure of the Market Risk framework. The exception was the MOSG business, which was part of DRCM. That business was subject to the Credit Risk framework. Apart from that, CRC's participation in the businesses exposed to the Subprime market was limited to the approval of transactions. CRC was one of the participants in the TRPA process and approved the long tenor CDS as part of the CDO business. CRC also monitored exposures to monoline insurers.

Managing risk is first and foremost the responsibility of the business. Consequently, many of the points that follow apply equally to the business. UBS's analysis identified a number of factors within the Risk Control functions, specifically within Market Risk, that suggest that the overall Risk Control framework was insufficiently robust. Those factors are outlined below.

6.3.6.1 Measurement and Monitoring Tools:

- Time series reliance: The historical time series used to drive VaR and Stress are based on five years of data, whereby the data was sourced from a period of relatively positive growth. Regular work being performed during the relevant period focussed on confirming the efficacy of existing scenarios based on broad based economic developments and historical events. When updates to methodologies were presented to Group and IB Senior Management, hindsight suggests that these updates did not attribute adequate weight to the significant growth in the US housing market and especially the Subprime market. The Market Risk function did not develop scenarios that were based on more fundamental attributes of the US housing market.

- Lack of Housing Market Risk Factor Loss limits: In a similar vein, it appears that no attempt was made to develop an RFL structure that captured more meaningful attributes related to the US housing market generally, such as defaults, loan to value ratios or other similar attributes to statistically shock the existing portfolio.

- Over-reliance on VaR and Stress: MRC relied on VaR and Stress numbers, even though delinquency rates were increasing and origination standards were falling in the US mortgage market. It continued to do so throughout the build-up of significant positions in Subprime assets that were only partially hedged. Presentations of MRC representatives to UBS's senior governance bodies did not provide adequate granularity of Subprime positions UBS held in its various businesses. No warnings were given to Group Senior Management about the limitations of the presented numbers or the need to look at the broader contextual framework and the findings were not challenged with perseverance.

- Over-reliance on ratings: MRC relied on the AAA rating of certain Subprime positions, although the CDOs were built from lower rated tranches of RMBS. This appears to have been common across the industry. There is no indication that MRC sought to review the quality of existing portfolios as questions were being raised in relation to the Subprime sector more generally. A comprehensive analysis of the portfolios may have indicated that the positions would not necessarily perform consistent with their ratings.

- Lack of recognition of idiosyncratic risk: Whilst an analytical review conducted by GIA identified certain risks in the Subprime trading books, senior risk control did not appear to take those issues into account when concluding that positions were hedged.

- Lack of comprehensive Subprime risk assessment: Senior risk control did not seek to undertake a comprehensive risk assessment of UBS's Subprime exposure, including understanding gross notional and hedge coverage. Efforts were made to capture the Subprime holdings by mid-February 2007, however materials did not effectively include the Super Senior and Negative Basis positions.

6.3.6.2 Limit Framework

- Lack of comprehensive limit framework: VaR and Stress were intended as portfolio risk measures and monitoring tools. These were to be supplemented with Risk Factor and Operational Limits. MRC did not develop a comprehensive limit framework to ensure that the Subprime portfolio would be contained within limits that matched Group Senior Management's concern about exposures in this asset class.

- Lack of response / speed of reaction: Although the limitations of VaR and Stress Loss were known, MRC do not appear to have prioritised closing gaps in the existing framework.

6.3.6.3 Reporting

- Complex and incomplete risk reporting: Market and Credit Risk developed a significant reporting suite. In the Market Risk area the reporting seems to be intensive. A number of attempts were made to present Subprime or housing related exposures. The reports did not, however, communicate an effective message for a number of reasons, in particular because the reports were overly complex, presented outdated data or were not made available to the right audience. The extensive catalogue of risk reports runs against a simple presentation of the risks that needed to be managed and identification of the actions that needed to be taken. Risks were siloed within the risk functions, without presenting a holistic picture of the risk situation of a particular business.

- Lack of substantive assessment: MRC did not routinely put numbers into the broader economic context or the fundamentals of the market when presenting to Senior Management.

6.3.6.4 Healthy Scepticism

- Independence: Fundamental analysis of the Subprime market seems to have been generally based on the business' view and less on MRC's independent assessment. In particular, there is no indication that MRC was seeking views from other sources than business. MRC provided support to the business that requested to receive more favourable treatment in relation to the application of the Stress Loss methodology to the CDO warehouse. While this may have been an opportunity to rethink the rationale for the business model as a whole, MRC accepted these proposals from the business and thus enabled it to grow further. Further, risk systems and infrastructure were not improved because of a willingness by the risk function to support growth.

- Lack of challenge to business: MRC appears not to have substantively challenged the CDO desk when significant limit increases for the RMBS warehouse were requested initially in late 2006, and then again in Q2 2007, when the Subprime CDO business was undergoing significant growth.

- Assumed liquidity: The Super Senior notes were always treated as trading book (i.e., the book for assets intended for resale in the short term), notwithstanding the fact that there does not appear to have been a liquid secondary market and that the business tended to retain the Super Senior tranche. This is supported by MRC's own analysis according to which reliance was placed on a home equity time series created from new issue rather than secondary market data. The liquidity assumption by MRC and Finance was based on new issues in a rapidly expanding market. Treatment under the "banking book" would have significantly changed the economics of the CDO desk business as this would have increased the required regulatory capital charges. Further, liquidity risk associated with having concentrated positions in an asset class (albeit AAA rated) does not appear to have been actively challenged.

6.3.6.5 Testing the Business Model

- Lack of holistic assessment: It does not appear that MRC thoroughly investigated the CDO business model. In particular, given the state of the Subprime market at that time, the CDO desk's request for limit increases in Q2 2007 to further support growth of the CDO business (which was ultimately not approved) might have given rise to a more fundamental re-evaluation of risks inherent in the CDO business.

6.3.6.6 Infrastructure Investment

- Inadequate systems: The existing risk management, finance and risk control systems were not sufficiently robust with respect to risk monitoring in relation to complex products. This led to an inability to obtain a portfolio view in certain products. These infrastructure issues had been raised but no substantial actions appear to have been taken to address concerns. Infrastructure limitations became even more problematic with the business growth into more complex, higher margin products.

6.3.6.7 Silos

- Lack of strategic coordination: The risk functions (Market, Credit and Finance) operate as independent units, brought together to assess individual transactions. It does not appear that these functions sought systematically to operate in a strategically connected manner.

6.3.6.8 NBI / TRPA Processes

- Shortcomings in approach: There was no NBI process for the CDO structuring business or for the AMPS business. AMPS trades were subject to repeated TRPA approvals – with the effect that whilst trade-by-trade approvals were obtained, substantively the depth and breadth of assessment was probably not at the same level that would have been applied if an NBI case had been submitted. Additionally, TRPAs for CDOs appear often to have been presented to the control functions for approval only at a relatively late stage, when the majority of the assets backing and to be transferred to the CDO special purpose vehicle had already been warehoused and the consequences of declining the proposal would have entailed costly unwinding of the warehouse.

- Focus on speed: The NBI and TRPA processes were also seen by some IB business areas, including Fixed Income, as bureaucratic and slow. The IB's NBI and TRPA processes were subject to a number of reviews and recommendations for improvement, over a period of several months – but the emphasis was generally on speeding up approvals as opposed to ensuring that the process achieved the goal of delivering substantive and holistic risk assessment of the proposals presented.

6.3.7 Finance Oversight

The basis of accounting for, and the valuations applied to, securities and synthetic positions was significant to the economic performance of the businesses with Subprime exposure and to the financial incentives for the staff involved in these businesses. In particular it was important to the timing and levels of profit recorded by the ABS / MBS and CDO desks in the Rates area that their strategies (for example the AMPS trades) were eligible for Day 1 P&L treatment. BUC operated as an independent control unit in confirming the determinations made by the ABS / MBS and CDO desks. UBS considered the approach to valuations and reporting taken by BUC in relation to the positions over the period and identified the following as a factor in UBS's lack of an effective response to the market dislocation:

- Inability to accurately assess valuation risk on a timely basis: A number of key indicators in relation to valuation issues over structured Fixed Income products were identified and reported in the period prior to Q3 2007. These included a reduced ability to source external prices to verify trader marks and general increases in the value of untested positions. Due to limitations in data, BUC were not in a position to challenge on a timely basis the assertion for valuation purposes of the flat or low risk nature of the retained Super Senior positions. BUC reported (as have other independent internal control units) that there were examples where significant manual intervention and reconciliation was required to assess the relevant risk nature, or where data was fragmented or insufficiently granular. These conditions existed for some time and represented latent and significant risks that were not reported by BUC as being of the highest priority until Q3 2007, after the impact of the Subprime crisis had become apparent.

6.3.8 Compensation

UBS has identified the following contributory factors related to compensation and incentives:

- Structural incentives to implement carry trades: The UBS compensation and incentivisation structure did not effectively differentiate between the creation of alpha (i.e., return in excess of a defined expectation) versus the creation of return based on a low cost of funding. In other words, employee incentivisation arrangements did not differentiate between return generated by skill in creating additional returns versus returns made from exploiting UBS's comparatively low cost of funding in what were essentially carry trades. There are no findings that special arrangements were made for employees in the businesses holding Subprime positions. However, the relatively high yield attributable to Subprime made this asset class an attractive long position for carry trades. Further, the UBS funding framework amplified the incentives to pursue compensation through profitable carry trades. For example, several Super Senior trades had relatively thin overall positive carry.

- Asymmetric risk / reward compensation: The compensation structure generally made little recognition of risk issues or adjustment for risk / other qualitative indicators (e.g. for Group Internal Audit ratings, operational risk indicators, compliance issues, etc.). For example, there were incentives for the CDO structuring desk to pursue concentrations in Mezzanine CDOs, which had a significantly higher fee structure (approximately 125-150 bp) than High-Grade CDOs (approximately 30-50 bp). Similarly, the CDO desk had an incentive to pursue AMPS trades, as they provided, compared to NegBasis trades, a less expensive (and therefore higher return) form of hedging. Also, Day1 P&L treatment of many of the transactions meant that employee remuneration (including bonuses) was not directly impacted by the longer term development of positions created. The reluctance to allow variations between financial reporting and management accounting made it less likely that options to vary the revenue attributed to traders for compensation purposes would be considered.

- Insufficient incentives to protect the UBS franchise long-term: Under UBS’s principles for compensation, deferred equity forms a component of compensation that generally increases with seniority. Although incentivisation of employees broadly builds in increasing levels of deferred equity for increasingly senior people, it remains the case that bonus payments for successful and senior IB Fixed Income traders, including those in the businesses holding Subprime positions were significant. Essentially, bonuses were measured against gross revenue after personnel costs, with no formal account taken of the quality or sustainability of those earnings.

Appendix 1: Letter from KPMG Ltd

KPMG

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UBS AG
Attention: Dr. Peter Kurer
P.O.B
8098 Zürich

Zurich, 18 April 2008

Dear Sirs

We have performed the procedure enumerated below solely to assist UBS AG ("UBS") in evaluating its "Shareholder Report on UBS's Write-Downs" (referred to hereafter as the "Shareholder Report") dated 18 April 2008 which is a summary of the report it has provided to the Swiss Federal Banking Commission ("EBK") dated 4 April 2008 (referred to hereafter as the "Report to the EBK").

UBS management is responsible for the preparation of the Shareholder Report and the Report to the EBK. UBS management have represented the Report to the EBK is based upon specific inquiries received from the EBK.

The sufficiency of the procedure is solely the responsibility of UBS. Consequently, we make no representation regarding the sufficiency of the procedure described below either for the purpose for which this letter has been requested or for any other purpose.

We have obtained the Shareholder Report, as well as the Report to the EBK (consisting of a factual report, appendices, and an executive summary) and performed the following procedure:

- We have read the Shareholder Report and the Report to the EBK and determined, in our professional judgment, the Shareholder Report contains a reasonable summary of the information that UBS included in their Report to the EBK.

We were not engaged to, and did not, conduct an examination, the objective of which would be the expression of an opinion on the accompanying Shareholder Report. Accordingly, we do not express such an opinion. We have not performed any procedures to determine the completeness and accuracy of the Report to the EBK, and therefore the Shareholder Report, nor of any of the figures contained therein. Further, we have not considered the appropriateness of any judgments or interpretations that are inherent within these reports. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

Our letter has been prepared for UBS management. Should any other party choose to rely on this letter they do so at their own risk. KPMG Ltd will accordingly accept no responsibility or liability in respect of it to persons other than the addressee of this letter.

Page 1 of 2

Our work is based upon information available as of the date of this letter and does not extend past the date of this letter.

Very truly yours,

KPMG Ltd

Stuart Robertson
Partner

Alex Geissbühler
Partner

Page 2 of 2

Appendix 2: List of Abbreviations and Glossary

ABS	Asset backed security; a debt security the value of which is derived from a pool of assets, or that is collateralized by the cash flows from a pool of assets. An ABS may be backed by loans, leases or other receivables. A security backed by mortgages (commercial or residential) is known as a Mortgage Backed Security or MBS.
ABS Relative Value	DRCM's Asset Backed Securities Relative Value trading strategy
ABS CDO Trading	DRCM's ABS Collateralized Debt Obligation trading strategy
ABX	The ABS Home Equity Synthetic Index (ABX.HE) as calculated by MarkIt
AC	Audit Committee
Alt-A	Alt-A loans are considered less risky than Subprime mortgages, but usually have lower credit quality than "prime" loans. Alt-A loans were originally designed for borrowers with clean credit records, but with other issues that often meant they provided fewer documents or even no documents showing what they earned. These loans were attractive to investors in mortgage-backed securities because they offered higher yields than traditional "prime" home loans, but were underpinned by the cleaner credit records of the borrowers.
AMPS	AMPS (abbreviation for Amplified Mortgage Portfolio trades) provide a platform for hedging the credit spread exposure from UBS holdings in long synthetic and cash assets. Typical trades would be that UBS buys protection on a specified percentage of market value losses in a specified reference pool of ABS assets (CMBS, CDO, CLO) or to buy protection between two predetermined levels. Structurally, AMPS are a synthetic ABS portfolio trade where investors take a leveraged exposure to a diversified pool of ABS. Investors take either the first market value loss on this pool or market losses between two predetermined levels. In return they receive a coupon of LIBOR + spread, where the spread depends on the quality of the underlying portfolio and level of market loss protection.
APAC	Asia Pacific region
ARMs	Adjustable rate mortgage products
Basis Risk	Basis risk is the risk associated with hedging one position with an opposite position using instruments that are not perfectly correlated. For example, on the basis of past statistical information the prices of two instruments may be expected to move broadly in line with each other and they may therefore be considered to provide a hedge for each other. Any divergence in price movements between the two – including day to day divergences from the average – will result in gains or losses.
BG	Business Group(s)
bn	Billion(s)
BoD or Board	The board of directors of UBS, as comprised at the relevant time.
bp	Basis point(s) – one hundredth of a percent

BUC	Business Unit Control, part of the IB Finance function
CDO	Collateralized debt obligation; a structured credit product which is a more complex form of Asset Backed Security (ABS). CDOs are backed by a portfolio of fixed-income assets. e.g. a pool of bonds, loans and other assets, but not all assets are necessarily of the same type (which distinguishes CDOs from other types of ABS). CDOs are structured to offer investors different degrees of risk and correspondingly different levels of income depending on which tranche they invest in. These tranches carry different credit ratings and are grouped into: senior tranches (rated AAA, AA), mezzanine tranches (A to BB), and equity tranches (unrated).
CDS	Credit default swap
CEO	Chief Executive Officer
CFC	The DRCM Controlled Finance Companies
CFI	Credit Fixed Income
CHF	Swiss Franc(s)
ChO	Chairman's Office
CMBS	Commercial Mortgage Backed Security
CMO	Collateralized Mortgage Obligation
CRC	Credit Risk Control
CRE	Commercial Real Estate
DRCM	Dillon Read Capital Management
EaR	Earnings-at-Risk; EaR is an assessment of the potential loss inherent in our business in the current economic cycle, across all business lines, and from all sources, including primary risks, operational risks and business risks. It is measured against a severe, low probability, but nevertheless plausible constellation of events over a one year time horizon.
E&Y	Ernst & Young AG, UBS's external auditors
EBK	The Eidgenössische Bankenkommission or Swiss Federal Banking Commission
EWM	GWM&BB's European Wealth Management business
FICC	The IB's Fixed Income Currencies and Commodities business
FICO	A FICO score is a credit score developed by Fair Isaac & Co. Credit scoring is a method of determining the likelihood that credit users will pay their bills.
FIRC	The IB Fixed Income, Rates and Currencies business
FX/CCT	The IB's Foreign Exchange / Cash Collateral Trading business, now referred to as the IB's Money Markets,

	Currencies and Commodities business ("**MCC**"), which is in turn part of the IB's Fixed Income Currencies and Commodities ("**FICC**") business.
GEB	The Group Executive Board of UBS, as comprised at the relevant time
GHMR	Group Head of Market Risk
GIA	Group Internal Audit
Global AM	UBS Global Asset Management, a business group of UBS
GRSC	The GEB Risk Sub-Committee, as comprised at the relevant time
Group CCO	The Group Chief Credit Officer at the relevant time
Group CFO	The Group Chief Financial Officer at the relevant time
Group CRO	The Group Chief Risk Officer at the relevant time
Group Senior Management	The members of the GEB and GRSC, at the relevant time
GWM&BB	UBS Global Wealth Management & Business Banking, a business group of UBS
Hedge	A position taken to offset potential changes in value of another position. The effectiveness of a hedge depends on the correlation between the factors from which the values of the two positions are derived – the greater the correlation, the more effective the hedge and the less basis risk is introduced. For example, an exposure to an auto manufacturer might be hedged by buying credit protection on that manufacturer (low basis risk) or on another auto manufacturer (higher basis risk), or on a manufacturer in a different sector (potentially high basis risk).
IB	UBS Investment Bank, a business group of UBS
IB ALCO	The IB Asset & Liability Committee
IB CRO	The IB Chief Risk Officer at the relevant time
IB MC	The IB Management Committee (superseded by the IB Executive Committee ("**IB EC**") in Q3 2007)
IB R&GC	The IB Risk & Governance Committee
IB Senior Management	The members of the IB MC and IB EC, at the relevant time
ISDA	International Swap and Derivatives Association
JGB	Japanese Government Bonds
KPMG	KPMG Ltd, Zurich
Level 2	Level 2 Assets are valued based on a valuation technique, which uses market observable inputs, where

Assets	available, derived from similar assets in similar and active markets, from recent transaction prices for comparable items or from other observable market data.
Level 3 Assets	Level 3 Assets are valued based on modeled / non-observable inputs, not corroborated by market data.
Limit	A quantitative control on the amount of exposure that risk managers can take. The limit can be expressed as a volume (total nominal or market value), or a potential loss given specified changes in (an) underlying market variable(s).
Long position	The status of owning or holding more of a given security or commodity than one has contracted to deliver in the future.
m	million(s)
MBS	Mortgage Backed Securities; a security similar to an asset-backed security, where the underlying assets are loans to owners of residential or commercial real estate secured with a mortgage over the property.
Market Risk	The risk of financial loss resulting from adverse changes in market variables, including general market risk factors such as interest rates, exchange rates, equity indices, commodity prices and credit spreads, and factors specific to individual names affecting the values of their securities and other obligations in tradable form, and derivatives linked to those names ("single name exposures").
Mezz / Mezzanine / Mezz ABS	A hybrid of debt and equity financing. Mezzanine ABS is typically used to finance the expansion of existing companies, and it is basically debt capital that gives the lender the rights to convert to an ownership or equity interest in the company if the loan is not paid back in time and in full. It is generally subordinated to debt provided by senior lenders such as banks and venture capital companies. Since mezzanine financing is usually provided to the borrower very quickly with little due diligence on the part of the lender and little or no collateral on the part of the borrower, this type of financing is aggressively priced with the lender seeking a return in the 20-30% range.
MOSG	The IB's Mortgage Origination Service Group, transferred to DRCM in June 2006
MRC	Market Risk Control
NBI	New Business Initiative (as defined in relevant UBS Group and Business Group policies)
NegBasis / Negative Basis Trade	A negative basis trade is a transaction in which UBS holds a highly rated (generally Super Senior AAA) structural financial asset hedged with a credit default swap on the exact same asset out to full legal maturity. The long position is typically an interest in the most senior tranche of a UBS issued CDO, where the underlying collateral consists of bonds or other securities, such as CMBS, RMBS securities. The protection seller is typically a monoline insurer.
NIM	Net Interest Margin certificates
OIF	The DRCM Outside Investor Funds
P&L	Profit and Loss
PFCA	The IB's Principal Finance Credit Arbitrage business, transferred to DRCM in June 2006

Q	Quarter
QRC	Quantitative Risk Control
Rating	Classification by a specialized agency of the credit quality of a corporation, bank, state or special purpose vehicle, or of securities issued by them, essentially expressing probability of default. Financial institutions typically assign their own internal ratings for the assessment of credit risk.
REPO	Agreement whereby commercial banks temporarily borrow liquidity from the central bank. Under a repurchase agreement, the Central Bank will buy a specific quantity of securities for a set period and subsequently sell them back to the bank it bought them from.
RFL	Risk Factor Loss; RFL limits provide a structure to control concentrations of exposure across the IB.
RLN	Reference Linked Note
RMBS	Residential mortgage backed security
RVT Portfolio	the Relative Value Trading Portfolio managed by IB FX/CCT
RWA	Risk Weighted Assets
Shareholder Report	This report as made available at http://www.ubs.com.
Short	In securities trading, a short position is one which has not yet been closed by the purchase of an opposite position.
SPG	The IB Securitized Products Group, part of the IB Fixed Income business.
Spreadlock	A spreadlock is an agreement that fixes the spread between the forward price of a financial asset and its underlying yield.
Stress Loss	Stress Loss is a measure of the potential loss arising from extreme but plausible scenarios used to assess how a portfolio might fare during a period of extreme events in financial markets.
Subprime	A Subprime borrower is one who has a high debt-to-income ratio, an impaired or minimal credit history, or other characteristics that are correlated with a high probability of default relative to borrowers with good credit history. It is generally accepted that a FICO score less than 620 is considered Subprime. In addition to having lower FICO scores, Subprime borrowers typically have a loan-to-value ratio ("**LTV**") in excess of 80%.
Subprime Losses	The net losses of USD 18.7 bn in relation to US residential mortgage sector exposures reported by UBS for the year ended 31 December 2007
Super Senior	The highest AAA-rated tranche of a CDO. As relevant to this Report, they may be considered in three categories: • Super Seniors hedged at inception through Negative Basis Trades; • Super Seniors hedged at inception through AMPS trades; and • Super Seniors unhedged at inception.

Super Senior VFN	Super Senior variable funding notes are unfunded seniors, mostly in a hybrid or synthetic CDO structure. The holder of this tranche commits to fund under certain conditions: however, the likelihood of these events was assessed as small. The holder earns a premium for assuming this super-senior risk which steps up to LIBOR + Spread if the notes are ever drawn upon.
Tier 1 Capital	The core component of capital which a bank is required to hold to support its risk-taking activities. Tier 1 capital comprises share capital, share premium, retained earnings including current year profit, foreign currency translation differences not recognized in the income statement and hybrid Tier 1 capital (part of equity attributable to minority interests), less accrued expected dividend, net long position in own shares, and goodwill.
TRPA	Transaction Requiring Prior Approval (as defined in relevant UBS Group and Business Group policies)
UBS	UBS AG
US	United States of America
USD	American Dollar(s)
VaR	Value at Risk: A statistically based portfolio measure of potential loss from adverse movements in market risk factors. VaR is measured to a specified level of confidence (99% in the case of UBS) and there is thus a specified statistical probability (1%) that actual loss could be greater than the VaR estimate.
VFN	Variable Funding Note
WM	Wealth Management