Swiss Doctoral Workshop in Finance, Gerzensee, June 14/15, 2007

Book of Abstracts (30.5.)

1. Pierre Bajgrowicz (joint with Olivier Scaillet)

Technical Trading Rules Performance under Transaction Costs:
Measuring Data Snooping with the False Discovery Rate

To address the issue of data snooping when testing several models simultaneously, we propose to use a new error measure built on the false discovery rate, which estimates the proportion of models incorrectly identified as superior. Being more powerful and not restricted only to the best model in the sample, our approach alleviates weaknesses of existing methods guarding against data snooping. As a demonstration, we revisit the apparent historical success of technical analysis. After including trading costs and performing persistence tests, we conclude that simple trading rules could not have been used to generate significant performance.

2. Gorazd BRUMEN

Mergers and Asset Prices in a Firm Network Economy

We examine merger activity and its effect on asset pricing in a firm network economy. Mergers create internal capital markets which change the cash flow risk structure of the merging firms. We propose a solution concept for coalitional games without the superadditivity axiom, which extends the Shapley value, and apply it to the merging activity of firms in a network. The potential of a merger increase the equity value of standalone firms. Higher network dependence decreases the number of coalitions formed, i.e. it encourages mergers, and gives higher value to a merging firm. Recession (expansion), as measured by the average debt/total assets ratio, generally increase (decrease) the number of coalitions in a network.

3. Maria Cecilia Bustamante

Testing Financed Q-Investment Models

This paper provides a partial equilibrium framework to assess the role of financing in the estimation of Q-investment models. Using a sample of US industrial firms between 1995 and 2005, results suggest that Q theory does explain investment once controlling for financing. The link between investment and cash flows arises naturally from the budget constraint of the firm. Changes in long term debt are also explained by Q. The measurement error approach to estimate Q-models does not account for the endogeneity between investment and financing. The asset pricing implications of the model also relate stock returns to bond yields as a function of firm characteristics. In sum, the empirical evidence on the link between investment and securities is found both in differences (i.e. returns) and in levels once accounting for financing.

4. Lorenzo Camponovo (joint with Olivier Scaillet and Fabio Trojani)

Robust Subsampling

We compute the breakdown point of the subsampling quantile of a general statistic, and show that it is increasing in the subsampling block size and the breakdown point of the statistic. These results imply fragile subsampling quantiles for moderate block sizes, also when subsampling procedures are applied to robust statistics. This instability is inherited by optimal block size selection procedures based on the minimum confidence interval volatility (MCIV) index. To overcome these problems, we propose for the linear regression setting a robust subsampling method, which implies a sufficiently high breakdown point and is consistent under standard conditions. Monte Carlo simulations and sensitivity analysis show that the robust subsampling with block size selection based on the MCIV index outperforms the subsampling, the classical bootstrap and the robust bootstrap, in terms of accuracy and robustness. These results show that robustness is a key aspect in the selection of optimal subsampling block sizes.

5. Anna Cieslak (joint with Andrea Buraschi and Fabio Trojani)

Correlation Risk and the Term Structure of Interest Rates

We develop a structural model of the yield curve, in which state variables evolve as a matrix-valued process of stochastically correlated factors. This approach extends the affine class of term structure models introduced by Duffie and Kan (1996) along two key dimensions. First, it grants a new element of flexibility in the simultaneous modeling of stochastic volatilities and correlations of factors, both under the physical and the risk neutral measure. Second, it admits a market price of risk, which - while consistent with a standard equilibrium argument - reflects not only volatilities but also co-volatilities of factors, and thus is unrestricted in sign. We demonstrate that the model provides a unified answer to a large number of empirical regularities of the fixed income market. Using its most parsimonious three-factor specification and a single set of calibrated parameters, we are able to reconcile: (i) the violations of the expectations hypothesis, (ii) the persistence of the conditional yield volatilities, as well as (iii) the hump in the term structure of forward rate volatilities and in implied volatilities of interest rate caps. Furthermore, the generality of our approach allows for a straightforward extension to higher dimensions of the state space. We show the enlarged model to successfully capture complex cross-sectional properties of the term structure dynamics evident in the return-forecasting factor of Cochrane and Piazzesi (2005) or in the time-varying conditional hedge ratio between bonds of different maturities. Importantly, the richness of the proposed framework does not impair its parsimony or analytical tractability. With no more than 24 parameters, our six-factor specification is very well comparable to a standard three-factor affine model. Moreover, closed-form solutions for zero-coupon bonds and semi closed-form solutions for the prices of interest rate derivatives are readily available for an arbitrary dimension of the state space.

6. Philipp Fasnacht (joint with Henri Loubergé)

International stock market correlations: A sectoral approach

Almost all studies dealing with international correlations look only at correlations at the market level. As the market is composed of different sectors, we take a deeper look by studying the behaviour of equity correlations at the sectoral level. We show how sectoral correlation coefficients influence the index correlation coefficient and decompose the latter into two parts; one that represents country factors and one that represents industry factors. This decomposition gives us some interesting insights such as why market level correlations are higher on average than sectoral correlations. We also show that sectoral correlations tend to be more stable over time than market level correlations and that a few sector correlations drive the evolution of the market level correlation.

7. Laurent Frésard

Financial Strength and Product Market Performance: The Real Effects of Corporate Cash Holdings

The literature on corporate cash holdings highlights that firms' cash policy is mainly driven by a precautionary motive. Accordingly, firms hold cash as a buffer to be in a better position to cope with adverse shocks when access to external capital is costly. While recent developments in this area have considerably enriched our understanding of corporate liquidity management, almost all the studies have been conducted in a single-firm perspective, thus overlooking the potential real consequences of liquid assets. In this project, I take a step in this direction and analyze whether and how a firm's cash position affects its performance in the product market. Specifically, using US intra-industry data from 1971 to 2005, I investigate whether a cash-rich firm can capture market shares from its cash-poor rivals, and examine the determinants of such strategic gains. Preliminary results indicate that firms with larger cash reserves than their industry-year average expand their sales markedly more than rivals in future years. Moreover, this "cash effect" turns out to be magnified when industry rivals face tighter financing constraints, when a firm shares a large fraction of its investment opportunities with competitors, as well as in response to negative (unexpected) shocks to aggregate demand. Noteworthy, my tests also show that the impact of cash on market share gains has increased over time and that the importance of this evolution varies along with industry characteristics and the financial structure of rivals. Overall, my results provide new evidence that a firm's cash policy encompasses an important strategic dimension by enhancing competitive performance.

8. Victoria Galsband

Risk Non-Sharing from Asset Pricing Perspective:
Consumption Heterogeneity in Non-Representative Consumer Models

This paper investigates the effects of incomplete consumption risk diversification on cross-sectional variation in equity stock returns. Our research is motivated by the idea that certain kinds of departures from frictionless Arrow-Debreu financial markets might shed some light on the relation between asset prices and consumption-based sources of risk. Market incompleteness coupled with highly persistent labour income shocks results into agents' inability to write incentive-compatible contracts based on idiosyncratic income processes. This gives rise to a consumption stream which is potentially more volatile than one studied in the representative consumer framework.

Using a non-representative consumer model and imposing trivial restrictions on joint distribution of returns and first two moments of consumption growth distribution, we derive a two-factor asset pricing relation. Besides the aggregate consumption growth rate, our model additionally accounts for the cross-sectional variance of consumption growth. We employ the world consumption dispersion factor to measure the degree of consumption risk "non-sharing". We study an economy in which agents face uncertainty of twofold nature. The article distinguishes between two risk components: the first is due to the aggregate or systematic consumption fluctuations and the second component arising from idiosyncratic individual consumption processes. The dissection between aggregate and idiosyncratic consumption risk factors helps to better understand the dynamics of international equity markets.

The results are obtained from data for global international equity markets of 8 industrialized countries: G-7 and Switzerland. Our findings suggest that in an incomplete heterogeneous consumer economy, stock returns anticipate the incomplete consumption risk sharing faced by individuals. We find that accounting for market incompleteness seems to have some potential to replicate the pattern of international asset returns. Not only do our results support that countercyclicality of world consumption dispersion seems to be mildly helpful for asset pricing. They also suggest that the level of risk sharing has correctly accelerated over the past decade: international financial markets integration and improved access of small firms to credit markets in the late 1980s seem to have weakened the role of the consumption dispersion factor as an imperfect proxy for consumption risk "non-sharing". In view of this fact, idiosyncratic risk measure has lost somewhat on its potential to explain the behaviour of international stock markets.

9. Natalia Guseva

Managers' Incentives and Takeovers

The paper uses a game theoretical real option framework to develop an equilibrium model of takeovers with agency costs. The roles of the bidder and the target, the timing and the terms of the takeover are determined endogenously in equilibrium. The model considers two firms with an option to merge. The manager of each firm derives private non-pecuniary benefits running the company. Bargaining about the takeover deal takes place between the manager of one company and the shareholders of the other. Two scenarios are possible depending on the relative sizes of the firms. If one firm is much bigger than another, there is basically no chance for a small firm to take over a big one and the roles of the bidder and the target are not questioned. In the second scenario, when the sizes of the firms are similar, any of the two firms can potentially initiate a takeover. In particular, each manager realizes that if she does not acquire, the other manager may pass ahead and acquire her firm. In both scenarios in equilibrium managers make a takeover bid sooner relative to the first best solution and are ready to give most of the synergistic gains to target shareholders to make them accept the deal. The results of the model are consistent with available evidence and new predictions are generated relating the takeover returns to the relative sizes and corporate governance structures of the bidder and the target. Keywords: Real options, Takeovers, Timing Game

10. Alexandre Jeanneret

Foreign Direct Investment and Exchange Rate Volatility: a Non-Linear Story

This paper investigates the influence of exchange rate volatility on foreign direct investment (FDI) flows in industrialized countries. With a dataset comprising 27 OECD countries over the period 1982-2002, I show the existence of a U-shaped relation: the effect of exchange rate volatility on FDI appears to be negative for low values of uncertainty, whereas it is positive for high levels. This stands in stark contrast to existing results in both the empirical and the theoretical literature. I also construct a real-options theory of a multinational which contemplates FDI to delocalize production abroad under a stochastic exchange rate. The model generates a prediction consistent with the data and offers a rationale for the suggested U-shape. Compared to the real-options literature, the difference in results stems from the fact that I calculate the expected foreign direct investment over a given time period. To estimate this value, I compute, for any level of project profitability, the probability of investing abroad. In contrast, previous studies limit their analysis either to one date in time or to the probability of investing in a unique profitable project. Hence, on the top of new empirical findings, the paper extents the real-options literature by providing an analysis on aggregate investment within a specified time period.

11. Davide LA VECCHIA

Robust Martingale Estimating Functions for Discretely Observed Diffusion Processes

This paper defines Robust Martingale Estimating Functions for discretely observed diffusion processes, in a setting where classical Maximum Likelihood approach is not feasible. We first extend Künsch's theory, specific for linear Markov process, to those diffusions defined by SDEs whose weak-solution can be both a linear and a non-linear Markov process. In particular we show the existence and the uniqueness of the Conditional Influence Function (IFcond) for M-estimators, implied by Martingale Estimating Functions. Then we use the IFcond in order to determine two proposals, both defining Robust M-estimators. Under standard assumptions, our M-estimators are pn-consistent and they have asymptotically Normal distribution. The first proposal defines a class of unstandardized estimators, having a bound on the IFcond that depends on the chosen parametrization. In contrast, the second proposal is more tractable, since it leads to a class of standardized estimators, having a selfstandardized sensitivity which is invariant w.r.t. the parametrization. To implement both our proposals we write an algorithm based on an iterative procedure. Using some spezial features of the Sturm-Liouville problem for the Infinitesimal Generator (spectral theory), our algorithm avoids internal Monte Carlo simulations, a task that typically characterizes classical robust procedures in time series (Robust GMM, Robust EMM or Robust Indirect Inference). The theory is illustrated by an example with a Monte Carlo study about a well known trigonometric diffusion. The simulation study shows that our Robust M-estimator corrects the asymptotic bias due to contaminations and maintains high efficiency at the reference model.

12. Michenaud Sébastien

Analysts Consensus Fixation and Corporate Investment (see separate document)

13. Boris Nikolov **(WITHDRAWN)**

Product Market Competition, Firm Idiosyncratic Volatility and Cash Holdings

In this paper, I examine the competitive environment of U.S. industrial firms from 1980 to 2005 and its impact on firms' cash holdings. I find a significant increase of product market competition during this period. This increase of product market competition leads to an increase of firm idiosyncratic volatility of fundamental cash flows. Facing an increase in volatility, firms increase their cash holdings for precautionary motive. Those findings provide a rationale for the evidenced positive trend of cash holdings.

14. Thomas Nitschka

Cashflow news, the value premium and an asset pricing view on European stock market integration

The decomposition of national CAPM market betas of European countries' value and growth portfolio returns into cashflow and discount rate news driven components reveals that i) high average returns on value portfolios are associated with disproportionately high sensitivity to national cashflow news which corroborates recent evidence for the U.S. and ii) two-beta variants of national CAPMs capture the cross-sectional dispersion in European stock returns. The latter finding is suggestive of relatively well integrated stock markets among the core European countries and reflects basic asset pricing theory. One (national) discount factor should price any (international) asset.

15. EMILIO OSAMBELA

International asset pricing with sentiment and default risk

This paper studies a two-country dynamic general equilibrium economy in which one country is overconfident in a public signal on the unobserved fundamental (sentiment risk), and contracts are not enforceable (default risk). I show how these two frictions jointly characterize equilibrium international stock prices and consumption. A key finding is that both frictions interact with each other. Solvency constraints generated endogenously by the non-enforceability of contracts bind more often due to sentiment risk. Conversely, the effect of sentiment risk on international stock prices depends on which country is solvency constrained. The interaction of sentiment and default risk can help explain some of the empirical asset pricing puzzles.

16. Florian PETERS

Vulnerable Executive Compensation

Risk-neutral executive compensation has increased over the past 15 years, but so has forced CEO turnover. Motivated by this observation, as well as by the trend towards stronger corporate governance which may result in less generous severance packages, we study the level and incentives of executive compensation when we account for the possibility that a CEO is fired and finds himself held to contractual severance agreements only. These agreements require, in most cases, forfeiture of unvested stocks and options and accelerated exercise of vested options. Our analysis implies that executive values of pay for S&P 500 CEOs are substantially lower than estimated in the literature so far, while executive pay-performance incentives are stronger. We further explore to what extent the evolution of risk-neutral compensation levels can be explained by a turnover risk premium.

17. Evgeny Plaksen

The Value of your Underwriter's Advice: An M&A Perspective

This empirical paper addresses the issue of the quality of financial advice given by investment banks regarding firms' acquisition activities. Motivated by anecdotal and documented evidence on the cases of "fee generating" motives in advisory business, the hypothesis of the paper is whether the better established contacts of investment bankers with firm's executives can boost the phenomenon of "chasing deals" and lead to a larger number of value destroying acquisitions.

The issue of inefficient investments, particularly, value destruction due to suboptimal acquisition decisions has been a debated topic in the literature over last decades. Moeller, Schlingemann and Stulz (2005) document that, although most acquisitions in their sample created value for shareholders, a relatively small number of disproportionately large acquisitions featured the worst announcement returns, resulting in negative aggregate wealth effect. Such suboptimal investment decisions are commonly alleged to reflect the divergence of CEOs' incentives from those of shareholders. On the other hand, investment bankers play indispensable role in key corporate events, and there is a growing strand of literature on the conflict of interest within investment banks. Loughran and Ritter's (2003) results suggest that banks may tradeoff the benefits of their advisory business clients with the fees generated by other departments.

In this light, I investigate whether closer contacts between investment bankers and corporate management encourages the firm to perform more acquisitions, particularly, to perform value destructive acquisitions characterized with lower abnormal returns. In this paper, the event establishing close ties between advisors and executives is taking the firm public, i.e. the conjecture is that those banks, who have underwritten company's IPO issue, have preferential access to its corporate executives, in that the bankers can more easily identify and insistently pitch potential takeover targets. Hence, the testable implication is that whenever M&A advisory is a relatively important business for the underwriter (as proxied by its M&A league tables rank or size of deals), the firm that it has taken public executes more acquisitions. If the "fee generating" hypothesis is true, the abnormal returns on such firms' acquisitions have to be lower as well. In contrast, whenever a firm goes public with an IPO-specialized bank, which does not seek extra fees from M&A advisory, the firm performs fewer acquisitions, and possibly the announcement returns are higher.

The preliminary results suggest that, indeed, firms going public with banks, who are potentially subject to the fee generating dilemma, perform more acquisitions and the returns on these acquisitions are lower. Presumably, the choice of the underwriter may create endogeneity problem, as those firms planning to expand via acquisitions after IPO, can deliberately choose to go public with banks that are more reputable in M&A business. To address the endogeneity concern, I use two-stage least squares regressions allowing for the strategic choice of underwriting bank.

18. Rodolfo Prieto Katunaric
Long run risk and technological change in a production economy
A stylized production economy with unpredictable technological changes and CRRA agents reproduces some of the features of the long run risk literature. In the baseline model, endogenous consumption growth departs from the i.i.d. framework, the wealth-consumption ratio moves slowly and encodes information about conditional market prices of risk, and under some parameterizations, the interest rate is lower than in the benchmark equilibrium, generating higher expected excess returns on wealth. The baseline model is extended to allow for (1) mean reverting productivity dynamics whose long-run mean is subject to technological shifts, and (2) the control, through R&D expenditure, of the intensity of technological changes. The latter sheds light on why recently explored R&D-based measures seem to predict market returns and risk premia.

19. Giovanni W. Puopolo
Firm Migration and the Value Premium
This paper studies the asset pricing implications of a general equilibrium model of lumpy investment. Firms face higher costs in contracting than in expanding their capital stock and decide to invest when the capital imbalance is large enough. Positive shocks to the profitability of the firms' assets in place increase the value of growth options, the probability that firms undertake investment, and also affect the capital imbalance through the feedback effect on the optimal consumption decision. As a result, the firm increases its value with respect to the accumulated capital. The model generates a mean-reverting process of firm migration across value as endogenous result, departing from the existing literature in which this property was rather imposed ad-hoc. The paper captures the familiar features of the empirical data, in particular the cross-sectional variation of expected returns.

20. Vahe Sahakyan (and Evgeny Plaksen)
OPTIMAL CONTRACT AND CAPITAL STRUCTURE IN VENTURE BACKED FIRMS UNDER BAYESIAN UPDATING
In this paper, we address the question of coexistence of venture capital and bank financing in startup firms in the setting with asymmetric updating of the information regarding the probability of success for a given project.

In our model, throughout the first stage of the project the VC and entrepreneur acquire insider knowledge (in the form of signal) regarding the project quality. The acquired information is superior to the information the bank, as an outsider and potential financier in the second stage of the project, can obtain. We model this informational advantage as the possibility for the VC and entrepreneur to update, through Bayesian updating, their posterior beliefs regarding the probability of success.

The participants of the startup firm are characterized as follows: the entrepreneur possesses the idea of the startup project and exercises costly effort to increase the future cash flows of the financed project; the VC contributes his (costly) managerial skills, industry expertise and networking abilities (referred to as *advice*), along with financing (*informed capital*), to complement the entrepreneur's effort to increase future cash flows; the bank exclusively plays a role of outside debt financier. In the binary state-signal setting of Bayesian updating, the insiders receive a signal about the quality of the project, which enables them to estimate the expected outcome better and, hence, to take more competent financing decisions. We derive the optimal capital structure and optimal sharing rules that depend on industry specific parameters, such as costs parameters, the illiquidity of the project, prior probability of success and likelihood matrix.

We contrast this setting with a framework where venture backed capital can be directed to an existing firm, i.e. through buyouts, and the bank can obtain the same signal, regarding the project quality, as the VC. Then the bank participation through debt financing is no longer inferior in terms of costs and efficiency. Our model and comparative statics analysis delivers a set of empirical implications which are tasted using the data obtained from VentureXpert SDC Platinum database.

21. Michael SCHACHTNER
Empirical evidence of macroeconomic conditions on capital structure choice
The field of theoretical capital structure research in corporate finance is relatively mature, ranging from Modigliani Millers' propositions to principal agent theories, the pecking order or newer market timing theories. Some of these theories have been tested – predominantly for U.S. and U.K. corporations – and confirm the existence of significant firm-specific determinants of a firm's capital structure (growth, size, profitability, asset intensity). This paper aims to extend the limited empirical evidence about exogenous determinants of capital structure for Swiss and German corporations (cf. Gaud et al (2005)). Specifically, I show the influence of macroeconomic conditions (e.g. interest rates, GDP growth) on the issuance of debt and the debt maturity structure in a regression model. Among the tested hypotheses is the question whether the emission of new short-term debt is positively correlated with low interest rates or vice versa. The results might also contribute to the understanding whether a firm's capital structure choice can be explained by the market timing theory. A panel data set from Datastream (*Thomson Financials/Worldscope*) is used for SMI and DAX firms between 1995 and 2005 (extended to 2006 as soon as financial statements for all coporations are published).

22. ROBERT SCHÖFTNER
SCENARIO-BASED CALCULATION OF CREDIT EXPOSURES
USING REGRESSION BASED MONTE-CARLO SIMULATION

Abstract. In this paper we would like to tackle one of the problems rising from the broad area of credit risk management, the scenario consistent way to model future credit exposure of complex products which don't admit for an analytical (closed-form) solution.

We present a technique to calculate future credit exposures relying on regression-based Monte-Carlo simulation (e.g. the Longstaff-Schwartz algorithm). Whereas the pricing of instruments is done under the risk-neutral probability measure used in the calibration of front office models, the dynamical evolution of future prices should be captured under the historical (physical) probability measure for risk management objectives. Therefore, we extend existing least-square Monte-Carlo approaches used for pricing purposes to allow for modeling of future credit exposures. We apply the established technique to several product examples such as American options, convertible bonds, (callable) interest rate swaps, as well as variance swaps, and benchmark the algorithm to products allowing for closed-form representation.

23. Iryna Shcherbakova
Consumption Risk Sharing over the Business Cycle: the Role of Small Firms' Access to Credit Markets

Consumption risk sharing among U.S. federal states increases in booms and decreases in recessions. We find that small firms' access to financial markets plays an important role in explaining this stylized fact: business cycle fluctuations in aggregate risk sharing are more pronounced in states in which small firms account for a large share of output. In addition, better access of small firms to credit markets in the wake of state-level banking deregulation during the 1980s seems to have loosened the dependence of aggregate risk sharing on the business cycle.

Considering a range of risk sharing channels which allows us to explore how the entire pattern of risk sharing - income smoothing through capital income flows, fiscal smoothing and - most importantly - intertemporal consumption smoothing through household savings and dissavings varies over the business cycle. This enables us to identify the sources of the procyclical variation in risk sharing: whereas income smoothing (through capital income flows) is strongly anticyclical, overall, aggregate consumption risk sharing is strongly procyclical because there are strong procyclical fluctuations in the extent to which a region's households can smooth consumption through borrowing and lending.

The access of small businesses to financial markets - in particular to credit - seems key in explaining this dependence of risk sharing on the phase of the business cycle. Risk sharing is more strongly procyclical in federal states where small businesses are particularly important as employers or where the income of small business owners (proprietary or proprietors' income) accounts for a large share of state personal income.

Moreover, we control for changes in the regulatory environment. Demyanyk, Ostergaard and Sørensen (2007) have shown that there is a strong effect of state level banking deregulation on the level of interstate income risk sharing. Our analysis here suggests that the impact of state-level banking deregulation on the *variability* of risk sharing over the cycle is easily equally important: while we corroborate that state level banking deregulation has improved interstate risk sharing through capital income flows, we show that it has also eliminated a large part of the *variability* of consumption risk sharing over the business cycle.

Our results also suggest an additional welfare benefit from banking deregulation: access to financial markets has become more reliable and is more easily available when households and firms need it most urgently - in economic downturns. A possible implication of these findings is that the welfare costs of a monetary tightening could have been substantially reduced as a result of the financial liberalization at the state level.

24. Bogdan Stacescu (joint with Artashes Karapetyan)
Information Sharing Arrangements in Credit Markets

We examine the conditions required for the existence of private credit bureaus, their ownership and coverage. Our model implies that bank consortia will most likely be preferred by banks, but that they will lead to restricted coverage. Independent credit bureaus have higher coverage, but they require good institutions. This implies an important role for public credit registers in developing countries with weak institutions. Our empirical findings largely support the implications of our model.

25. Stephan Süss
The Valuation of Volatility Options *(withdrawn)*

Even before the Chicago Board of Options Exchange (CBOE) launched the first plain vanilla volatility options written on the implied volatility index VIX on February 24th, 2006 researchers proposed several different valuation models. Due to the lack of traded option prices, no study has empirically examined the suggested frameworks so far. We fill this gap by investigating most of the existing volatility option valuation models from three perspectives (i) consistency of option implied parameters with historically observed time series counterparts (ii) model's out of sample pricing power, and (iii) hedging effectiveness. We find that modeling the mean reverting behavior, the leverage effect and stochastic volatility of the underlying's dynamics is essential to obtain accurate out of sample pricing fits. Furthermore, market participants essentially seem to price random jumps.

26. Philip Valta
Strategic Behavior, Financing, and Stock Returns
In this paper I analyze whether and how the strategic interaction between shareholders and creditors in the event of default affects stock returns ex ante. By endogenizing shareholders' decision to default, the model generates new predictions linking firm characteristics with stock returns through an intuitive economic mechanism. In particular, the model predicts that stock returns are higher for firms that face high debt renegotiation difficulties and that have a large fraction of secured debt. On the other hand, stock returns are lower when shareholders maintain strong bargaining power, for firms subject to high liquidation costs, and for firms that have a large fraction of convertible debt. Noteworthy, these effects are magnified when firms are close to default. Using a large sample of publicly traded US firms between 1980 and 2005, I present new evidence on the link between firm characteristics and stock returns for firms close to default, which is strongly supportive of the model's predictions.

27. Andrea Vedolin (joint with Andrea Buraschi, Fabio Trojani)
The Joint Behavior of Credit Spreads, Stock Options and Equity Returns when Investors Disagree
This paper studies an extension of the structural Merton's (1974) model of credit risk, in which equilibrium asset prices are affected by an additional priced risk factor due to investors' disagreement. We show that the equilibrium interaction of disagreement and credit risk helps to understand many puzzles in the asset pricing literature. Disagreement rises credit spreads and the volatility of equity, but it can higher or lower the price of equity, depending on the leverage structure of the firm. This feature yields sharp implications for the joint behavior of credit spreads and stock returns, in dependence of the latent degree of divergence of opinions. In addition, it has consequences for option prices, because the implied volatility skew is more pronounced for high-leverage firms, but can be inverted for firms a more moderate leverage. At the same time, the prices of some single-stock options can co-move in a non monotonic way with the price of the underlying stock. We test empirically the model's predictions using a comprehensive data set, which includes information about professional earning forecasts of single firms, individual stock prices, corporate credit spreads, and single-stock option prices. The main model implications are strongly supported by the data: Beliefs disagreement is the main risk factor influencing the price of equity, credit spreads and option prices, and dominates other indicators – like, e.g., option-related variables – in explaining the cross-section and the time-series of credit spreads, option prices, and stock returns

28. Nimrod VULKAN
Latent factors and exogenous kernels in a DSGE Term Structure Model
We show that, in order to explain the post-Volker term structure if interest rates, a benchmark small scale New-Keynesian Dynamic Stochastic General Equilibrium model with monetary, preference and technology shocks needs to take on parameter values that produce non-stationary IS and LM curves. We then specify more flexible stochastic discount factors that nest the endogenous kernel and test their performance against the benchmark. Finally we investigate how much of the term structure is explained by the benchmark macro model when enriched with latent factors.

29. Zhihua (Cissy) Chen
Liquidity in Financial Markets: Evidence from a Natural Experiment
In this paper, we examine liquidity effects in corporate bond markets due to an exogenous liquidity shock. The 2005 Lehman Brother Bond indices.inclusion rule change provides us a natural experiment to conduct this investigation. The inclusion rule change is not accompanied by any fundamental change in firms risk profiles, thus assures the exogenous nature of the liquidity shock. We employ a comprehensive dataset on corporate bond transaction prices and credit default swaps to examine the effect of the new rule on firms debt and equity valuation, as well as firms financing policy change. We apply a portfolio approach to adjust for event clustering in our event study methodology. We also implement bootstrap techniques and statistical tests based on pseudoportfolio to obtain adequate accurate inferences. We find that the announcement of the new rules has an economically and statistically significant effect on bond prices. The longer its year to maturity, the stronger effect on its abnormal return. We also find that, although number of trades do not change, daily trading volume especially due to large trades increases dramatically after the announcement.