EUROJÄRJESTELMÄ
EUROSYSTEMET

RESEARCH NEWSLETTER

2/2009

Contents

Editor
Jouko Vilmunen

Publisher
Bank of Finland

ISSN 1796-9131 (online)

PO Box 160,
FI-00101 Helsinki

Email:
research@bof.fi

www.bof.fi/en and
www.bof.fi/bofit_en

Editorial

The idea of economic agents, most notably households, facing borrowing constraints which, if binding, make it more difficult for them to smooth their life-cycle consumption stream has been an essential part of the macroeconomics of consumption behaviour almost from the outset, when modern theories of life-cycle consumption were first introduced into economics more than 50 years ago. Although evidence is mounting against some parameterisations of life-cycle models, the framework has retained its position at the centre of thinking on inter-temporal consumption allocation and, more generally, on the dynamics of aggregate demand. This is no doubt an indication of the resilience and flexibility of the framework in incorporating new features, which may not actually be that surprising.

The levels of consumption in a life-cycle model are pinned down by two conditions. The first of these, inter-temporal Euler equations, relates expected consumption growth to inter-temporal relative prices or, more simply, to real interest rates. The second condition underlying consumption levels is the inter-temporal budget constraint, which defines the set of feasible consumption paths available for households. The Euler equations are valid under a variety of circumstances. In particular, one does not need to specify the complete set of assets available to households. As long as there is one asset held and traded by households, there is a Euler equation holding for that particular asset, no matter what the households do in other markets.

From an empirical point of view, the Euler equation approach basically exploits the fact that, approximately, future changes in consumption are unpredictable, given currently available information, and, in particular, they should not be related to predictable changes in income. A not insignificant part of the empirical evidence suggests violations of this condition that take the form of excess sensitivity of consumption growth to expected changes in income. A much-favoured interpretation of this evidence is that there are restrictions to inter-temporal trade or binding borrowing constraints faced by households that prevent them from optimally smoothing their consumption paths. However, excess sensitivity of consumption is not necessarily due to binding borrowing constraints and can be explained as reflecting non-separability between leisure or labour supply and consumption, demographic effects and aggregation problems. Needless to say, the potential sources of excess sensitivity have differing policy implications. In the current policy debate, many are willing to argue that one of the implications of the collapse of the international financial markets is that households, even if willing, find it increasingly difficult to obtain finance for consumption purposes. If so, the obvious policy response is to focus on measures that will restore efficient functioning of the financial system.

Clearly, further research is needed, and it would be most welcome to have research that could, hopefully, introduce new and more efficient tools for us to be able to identify from the data the effects of borrowing constraints and other sources of excess sensitivity of consumption. Also, as there already exist promising attempts to account, both qualitatively and quantitatively, for the effects of news and expectations on consumption and aggregate activity, further effort in this line of research is warranted to gain deeper understanding of consumption and aggregate demand dynamics.

Jouko Vilmunen

Borrowing constraints or non-separability? – Seeking an answer from the data

The relationship between consumption and income variability has been an integral part of the research on household consumption behaviour for at least most of the time since systematic modelling of optimal life-cycle consumption behaviour was first introduced into economics more than fifty years ago. Recent vintages of models seeking to account for the relationship between consumption and income variability have started to employ ideas from the class of private information models with asset accumulation to derive empirical implications to be tested on data. Interest in these models is to some extent motivated by the empirical failure of simpler approaches, including the hypothesis of complete insurance markets and models where the only insurance available to households is self-insurance, such as simpler versions of the life-cycle and permanent income hypothesis.

As the complete insurance hypothesis is rejected by the data, many researchers have followed the alternative approach of assuming exogenously incomplete markets. To take a concrete example, the Bewley model embeds a version of the permanent income model in a market structure where the only mechanism available to households to smooth consumption over time is through personal savings, possibly with a single asset. Inter-temporal trades can be further limited by the impossibility of borrowing beyond a certain level. In between the two extremes of complete markets and highly limited and exogenously given inter-temporal trade opportunities, research features other possibilities where individuals have access to some state-contingent mechanisms providing insurance over and above that considered in the Bewley model.

The robustness of the Euler equation, one of the key conditions pinning down consumption levels in life-cycle models, is a big advantage from an empirical point of view. Since Hall's (1978) seminal contribution,[1] many authors have focused on the orthogonality restrictions implied by the Euler equation for consumption that can be derived from the consumer's inter-temporal optimization problem. Under this approach, we do not need to be informed about many aspects of the environment in which the consumer operates or even about the information sets available to consumers. Whereas the level of consumption could depend in an unknown way on income expectations and other unobservable quantities, the Euler equation does not need a closed-form solution and basically exploits the fact that, approximately, changes in log consumption are unpredictable given currently available information. In particular, these changes in consumption should not be related to predictable changes in income. Violations of the orthogonality conditions are all too familiar from the existing research. Many of the reported violations take the form of excess sensitivity of consumption growth to expected changes in income, which evidence has been interpreted as reflecting restrictions on inter-temporal trade, ie as evidence of the existence of (binding) borrowing constraints. However, there are also authors who argue that excess sensitivity does not necessarily reflect the existence of binding borrowing constraints faced by consumers. Instead, excess sensitivity can be due to non-separable preferences between consumption and leisure (labour supply), demographic effects or aggregation problems.

A reliable empirical test which would enable us to differentiate the effects of borrowing constraints from those of non-separabilities on consumption in different times and states of the world would of course be most welcome. Designing such a test has proven to be difficult, however. On the other hand, we do not lack efforts to tackle this issue. In a recently published Bank of Finland

1 Hall R. (1978), 'Stochastic Implications of the Life Cycle-Permanent Income Hypothesis: Theory and Evidence', Journal of Political Economy, December 86(6), p. 971–987.

discussion paper, Consumption Euler equation with non-separable preference over consumption and leisure and collateral constraints (BoF 09/2009), Juha Kilponen sets up an inter-temporal consumption problem for a household displaying non-separable preferences where the household faces (binding) collateral constraints. The particular model that Kilponen employs is an extension of Iacoviello's (2004) model,[2] which displays an economy consisting of two types of households, unconstrained and constrained ones. Both types have preferences defined over consumption, leisure and housing. As is typical in these models, the unconstrained households are more patient, valuing future consumption relatively more than the constrained households. Furthermore, housing is separable from consumption and leisure, and households can trade houses, the consumption good and a riskless real bond. Consumption and leisure enter non-separably in the per period utility function, the form of which imposes cancellation of income and substitution effects between consumption and leisure. This functional form is used in eg neoclassical models of business cycle and growth[3] and also in modelling optimal labour supply decisions by households.[4]

Kilponen derives the consumption Euler equations under the specified conditions for both the constrained and unconstrained households, which, after linearization, he aggregates using the 'λ aggregator', ie assuming that the share of constrained households equals λ , to arrive at the aggregate Euler equation for the economy. The resulting Euler equation for aggregate consumption incorporates the effects of non-separability and collateral constraints and displays the interdependence between changes in aggregate consumption, changes in aggregate hours, changes in housing demand and real interest rates along the aggregate consumption path. Real interest rates are measured in terms of both consumer prices and house prices. To estimate the Euler equation, Kilponen collects quarterly data on aggregate consumption, aggregate hours, consumer prices, house prices and interest rates in Finland over the period 1987Q1–2008Q2. As a proxy for housing demand, Kilponen uses (de-trended) per capita total residential investment over the same sample period. Given this data, the aggregate Euler equation is then estimated by GMM using three to four lags of each 'right-hand side variable' as instruments together with the propensity to consume (consumption-to-income ratio), world output and the debt-to-income ratio as additional instruments. To account for the possibility of moving average errors, only lags greater than or equal to two for the 'right-hand side variables' are included in the instrument set.

Kilponen estimates three different Euler equations, depending on whether effects from non-separability or collateral constraints and non-separability are present in the estimated equation. According to the results from the whole sample, the estimated elasticity of inter-temporal substitution varies depending on the exact form of the estimated Euler equation, with point estimates spanning the range from 0.3 to 0.6. Apart from the standard Euler equation, ie the one without non-separabilities and collateral constraints, the estimated elasticity of inter-temporal substitution is significantly positive at conventional significance levels. The estimated consumption share of the constrained households, 0.63, is, on the other hand, somewhat high relative to existing international evidence. Kilponen conjectures that this may be due to delayed financial liberalization that started at around the time the sample period starts. This may well be the case, and, while financial liberalization progressed fairly rapidly, resulting in rapid

2 See Iacoviello, M (2004), 'Consumption, house prices, and collateral constraints: a structural econometric analysis', Journal of Housing Economics 13(4), p. 304–320.
3 See eg King, R, Plosser, C and Rebelo, S (1988), 'Production, Growth and Business Cycles I: The Neoclassical Model', Journal of Monetary Economics 21, p. 195–232.
4 See eg Basu, S and Kimbal, M (2002), 'Long-run labour supply and the elasticity of intertemporal substitution for consumption', Working Paper, University of Michigan.

house price inflation potentially relaxing the collateral constraints, the boom was short-lived, as the economy plummeted in the early 1990s as a result of the collapse of the fixed exchange-rate system and the ensuing banking crisis. However, a fair amount of uncertainty remains about the true value of the consumption share of constrained households, as the estimated standard error is relatively high. Thus, the data suggests there is a high probability the true value of λ can be as low as 0.18 and as high as 1.

The estimation results on the whole sample also indicate that the point estimate of the liquidation cost parameter and the inverse (price) elasticity of housing demand is perhaps surprisingly low, 0.11 and 0.03 respectively, implying, in the latter case, that the underlying household preferences are almost linear in housing. That the estimated liquidation cost parameter is low (and imprecisely estimated) suggests either that only a small fraction of the housing wealth is pledgeable, so that the collateral constraint is fairly tight, or that the discount factor of unconstrained households is also very small. Neither of these seems plausible; so the low estimate is slightly puzzling, as Kilponen also seems to acknowledge when he says that the estimate value is unrealistically low and the liquidation cost parameter is typically calibrated in DSGE models to higher values. Kilponen re-estimated his model after fixing the liquidation cost parameter at higher values, but the outcome seems to suggest a nasty trade-off with a smaller estimated inter-temporal elasticity of substitution and a negative consumption share of constrained households.

As Kilponen rightly notes, visual inspection of the goodness of fit of the various models clearly suggests that, for the whole sample, the extended model with both non-separable utility and collateral constraints does better than the two alternatives of separable utility with no collateral constraints and non-separable utility with no collateral constraints. Root-mean-squared errors and the correlation coefficient between actual consumption growth and dynamic forecast ranges, which range from -0.46 in the standard model to 0.57 in the model with non-separable utility and collateral constraints, agree with the eye.

Evidence from the post-crisis period, from 1995 onwards, indicates that the elasticity of inter-temporal substitution has increased and the consumption share of constrained households fallen somewhat. The liquidation cost parameter, too, seems to have increased, but continues to be imprecisely estimated. Moreover, the inverse elasticity of housing and the liquidation cost parameter, although of the right sign, are also imprecisely estimated. In terms of the goodness of fit, the two extensions of the standard model seem to perform equally well with the correlation between actual consumption growth and dynamic forecasts at around 0.25, which is thus clearly smaller for the latter model than in the whole sample. The empirical fit of the standard model is also better for the latter part of the sample, although the correlation between actual consumption growth and dynamic forecasts continues to be negative. Towards the end of his estimation exercise, Kilponen runs a number of robustness checks with different subsamples and instrument sets. The picture that emerges from these checks suggests that the elasticity of inter-temporal substitution seems to have risen towards the end of the sample period; the data does not contain much information on the value of the inverse elasticity of housing demand, the liquidation cost parameter or the fact that the consumption share of constrained households remains persistently high across sub-periods and instrument sets.

What we could take home from these estimations is that there does seem to be an interaction between housing and aggregate consumption, but the collateral constraint may not, after all, be the most important channel of influence between the two. Perhaps it is housing wealth and consumption, perhaps non-separability between

consumption and housing that is more important. Be that as it may, Kilponen's paper nevertheless provides an extremely interesting approach to estimating Euler equations and contributes to the existing research on consumption in dimensions other than simply explaining violations of the orthogonality conditions implied by the standard Euler equation for consumption. Kilponen's work clearly encourages further research to gain a deeper understanding of aggregate consumption dynamics under the specified conditions of his model.

Jouko Vilmunen

Banks' risk taking under Basel II capital requirements: Does mandatory information disclosure affect banks' risk taking?

One conclusion that has been drawn from the ongoing financial crisis, and in particular from the original subprime crisis, seems to be that there were serious shortcomings in financial institutions' risk management and the transparency of their actions. This is despite the perhaps more controversial observation that it was the realization of adverse macro or aggregate shocks that triggered the crisis and that the relatively long period of apparent macroeconomic stability was conducive to the perception of reduced macroeconomic risks. Perhaps more alarmingly, risk management appeared to have failed in some of the biggest and most sophisticated financial institutions. Moreover, the lack of transparency in financial institutions' exposures to securitized instruments and off-balance sheet vehicles has surely contributed to making risk management, both in individual financial institutions and throughout the whole financial system, more complex and difficult. Lack of transparency has consequently also contributed to the severity of the crisis.

The policy conclusion from this piece of analysis must then be that financial institutions' risk management and the disclosure of their on- and off-balance sheet exposures must be improved. The new Basel II framework and, in particular, banks' capital requirements are widely believed to be a step in the right direction in this respect, as Pillar 3 of the new framework – market discipline – requires banks to disclose detailed information on their risk profile, capital adequacy and risk assessment processes. One of the objectives of Pillar 3 is to help investors in identifying changes in banks' conditions and incorporating these changes into banks' security prices. This, in turn, is intended to enhance banks' incentives to behave prudently and improve their risk management.

It is somewhat surprising that most of the academic research on Basel II has hitherto concentrated mainly on the effects of minimum capital ratios, ie on Pillar 1 of the new framework, despite the potential importance of Pillar 3 in light of the current financial crisis. In a forthcoming Bank of Finland discussion paper, *Banks' risk taking under Basel II capital requirements*, Jukka Vauhkonen takes steps to extend the existing literature on Basel II by examining the combined effects of minimum capital requirements and information disclosure requirements incorporated in Pillar 1 and 3 respectively on banks' risk-taking behaviour.

Vauhkonen employs a Salop-type spatial model of imperfect banking competition with four types of agents, banks' inside and outside shareholders (insiders and outsiders), depositors and the regulator or supervisor. Insiders, who are either owner-managers or old shareholders and maximize their own payoffs, make the decisions in the banks. Banks are funded by fully insured deposits and capital and compete for deposits by setting their deposit rates. Banks' pricing or

market power is the result of depositors having to incur transportation costs when travelling to their banks. There is a single loan portfolio that banks invest their funds in. Whether a bank is successful in its investment policy depends on the quality of its risk measurement and management systems, which, for brevity, Vauhkonen, in presenting his analysis, dubs 'quality of risk management' or just 'quality'.

The success probability of a bank is chosen by the bank's insiders. Without common disclosure requirements and criteria such as Pillar 3, this quality is unobservable to outside market participants, as Vauhkonen assumes that the incentives for voluntary disclosure are not sufficiently strong, thus making voluntary disclosure effectively unfeasible. Furthermore, in the absence of disclosure and regulation, the equilibrium quality of risk management is lower than in the first-best case, as insiders do not internalize the cost of deposit insurance and, consequently, the full social cost of a bank failure. This, as usual, is the efficiency cost generated by the underlying moral hazard problem.

The regulator's aim, on the other hand, is to alleviate the moral hazard problem by requiring banks to raise capital. By setting capital requirements, the regulator attempts to increase banks' shareholders' losses in the event of default and induce banks to reduce the probability of failure by improving their risk management systems.

Given this set-up, Vauhkonen models three different Basel-type regulatory capital approaches for credit risk – the previous Basel I capital requirements and the two options of the new Basel II capital requirements, the standardized approach (SA) and Basel II internal ratings-based (IRB) approach – in a stylized fashion and investigates their effects on the equilibrium quality of banks' risk management.

As Vauhkonen notes in his paper, one can conclude from the existing literature that capital requirements may potentially influence bank insiders' incentives through two effects, the dilution effect and the capital-at-risk effect. The dilution effect typically affects incentives adversely, the reason being that capital requirements force banks to raise new capital, which erodes bank insiders' payoffs and reduces their incentives to put effort into improving the quality of risk management. On the other hand, the larger a bank's capital-to-deposit ratio is, the larger will be the downside risk that bank insiders bear. This capital-at-risk effect tends to improve insiders' incentives. Vauhkonen emphasizes the capital-at-risk effect plays a key role in his analysis.

In his model set-up, Vauhkonen first characterizes Basel I by its usual key features of a flat-rate minimum regulatory capital-to-deposits ratio. He also assumes that, under Basel I, the quality of banks' risk management is unobservable to outsiders. Given these assumptions, Vauhkonen shows that Basel I has no effect on bank risk-taking relative to the benchmark of no regulation, as neither the dilution effect nor the capital-at-risk effect are at work. By way of confirming some of the existing results, Vauhkonen notes that the dilution effect does not operate, since the cost of capital requirement is fully transferred to depositors. At the same time, the capital-at-risk effect does not operate either, since insiders have no own capital at stake and since the risk of an individual bank is unobservable to outsiders. Consequently, these results suggest that flat-rate capital requirements, such as Basel I, can be fairly ineffective in reducing excessive risk-taking by banks, if there are serious conflicts of interests between banks' insiders and other equity-holders and if insiders' actions are not transparent to market participants.

Vauhkonen proceeds to examine a scenario in which all banks are required to use the Basel II standardized approach, which, as he rightly notes, can be regarded as a refinement of the Basel I approach. The difference between the approaches in the paper's set-up is that, under the standardized approach, the quality of banks' risk management systems is made either

fully or partially observable by the Basel II Pillar 3 disclosure requirements. Vauhkonen is able to show that by making the risk of an individual bank observable, disclosure affects the bank's cost of capital and increases the equilibrium quality of banks' risk management systems. Consequently, Vauhkonen's analysis nicely supports the argument put forward by some other researchers in the field[5] that the ultimate success of Pillar standards rests on how well Pillar 3 functions.

In the next step, Vauhkonen examines a scenario in which all banks must choose the IRB approach, under which banks can use their own internal estimates of risk components to compute capital requirements for their exposures. However, as Vauhkonen rightly notes, a full-blown analysis of the risk-sensitive IRB capital requirements is not possible in the paper's set-up with a single asset. Vauhkonen proposes a way out of this dilemma by considering a reduced version of the IRB approach where he models three key elements of it.

Firstly, to be eligible to enter into and use the IRB approach a bank has to satisfy an extensive set of qualifying requirements. In Vauhkonen's model, these requirements amount to defining the minimum quality of banks' risk management systems under the IRB approach. Secondly, the minimum capital requirement for banks is generically[6] lower under the IRB approach than under the standardized approach. Thirdly, in line with the standardized approach of Basel II, the quality of banks' risk management systems is made either fully or partially observable by the Pillar 3 disclosures.

Given these assumptions, Vauhkonen shows that superiority between the IRB approach and the Basel II standardized approach in reducing banks' risk-taking depends crucially on the stringency of the Pillar 3 disclosure requirements and the IRB qualifying requirements. More specifically, he shows that under stringent Pillar 3 disclosure requirements and lax IRB qualifying requirements, the equilibrium quality of banks' risk management systems is higher and hence their equilibrium risk-taking lower under the Basel II standardized approach than under the IRB approach. Under lax Pillar 3 disclosure requirements, in turn, the IRB approach induces lower bank risk-taking at the equilibrium than the standardized approach.

The analysis provide by Vauhkonen is very interesting and contrasts nicely with some existing theoretical analyses on the effects of mandatory disclosure requirements on banks' risk-taking and financial stability. Indeed, it is possible find results in the background literature suggesting that a mandatory disclosure requirement may not always be beneficial from the point of view of controlling banks' incentives for excessive risk-taking. As Vauhkonen rightly notes, his analysis focuses on the beneficial effects of increased transparency, and, in addition to extending the literature on the effects of mandatory disclosure requirements as such, his contribution relates the analysis explicitly to the new Basel II framework. Hence, we can expect and certainly encourage further contributions on the topic from researchers interested in the potential effects of Basel II on banks' risk-taking behaviour. Further research will surely be rewarding. Vauhkonen's contribution bears witness to this.

Jouko Vilmunen

5 In this context, Vauhkonen refers to Gordy and Howells (2006), Pro-cyclicality in Basel II: Can we treat the disease without killing the patient? Journal of Financial Intermediation 15, 395–417.

6 'Generically' is here meant to emphasize the fact that, as noted by Vauhkonen, the Basel Committee's quantitative impact studies do indeed suggest that the average minimum capital requirements under the IRB approach are lower than those under the standardized approach.

Institutions to play a key role in growth in transition economies and China

The effects of institutions on economic performance have been widely debated in evolutionary economics. It basically seems that well-functioning economic and political institutions (laws and related monitoring, governance structures, democracy, economic policy, etc) underpin a free market economy and contribute to growth. Accordingly, institutions and their functioning are one of the key areas of research in transition economies, in which the institutions inherited from communist regimes have degenerated and become corrupt, no longer operating as hoped for. Even so, research findings concerning the effects of institutions on economic growth are contradictory precisely in respect of these countries, as the evidence for and against the proposition is more or less equal. On the other hand, it is difficult to reliably assess whether healthy institutions generate growth or whether growth helps develop institutions. The impact of human capital also occasionally mixes with the effects of institutions. Even the definition of an institution is not strictly delimited, and different types of institutions appear to have highly diverse effects on both development and growth.

In March 2009, the Bank of Finland Institute for Economies in Transition (BOFIT) hosted a seminar on the long-term growth potential of Russia and China [http://www.bof.fi/bofit/tutkimus/tyopajat/long-term_growth_potential/growth_russia_china.htm]. Institutions were naturally given a high priority in seminar presentations. Goel and Korhonen assessed economic growth in China and Russia in relation to the rest of the world and concluded that economic freedom strengthens growth. It might come as a surprise that corruption appears to boost growth, as bribery may add momentum to otherwise slow bureaucracy. Fang and Zhao dealt with the positive impact of western culture on Chinese economic growth. As mentioned above, it is difficult to ascertain the causes and effects between institutions and growth. To avoid this problem, Fang and Zhao observed past factors impacting China's current regional institutions and used these observations to forecast regional differences in standards of living in 2003. Regions where western influence was strong at the beginning of the 20th century appear to have better institutions in place and are presently growing faster than other regions. Du, Lu and Ta, in turn, estimated the role of the Chinese government as a guardian of law and order and sought to determine the role that authorities should seek in market regulation. They showed that, as the central government has been slow in enacting and implementing laws, regional authorities have assumed a greater role in promoting business activity. So far, this model seems to operate well.

At the beginning of 2009, the BOFIT DP series published a study focusing on the effects of economic freedom on growth and particularly on the development of labour productivity in transition economies (BOFIT DP 1/2009). The study sought to avoid some shortcomings in previous research, by controlling for eg the impact of human capital and the dependence of growth on past trends. The nonlinearities of economic freedom were also taken into account, as well as the fact that a large proportion of output generated in these countries remains outside official statistics. After these adjustments, it was indicated that freer transition economies appear to grow faster. On the other hand, when account is taken of the combined effects of economic freedom, investment and the size of the public sector, the positive implications of freedom diminish. If, for example, both economic freedom and the public sector expand, their combined effect on growth may be detrimental. This finding could partly explain previous results according to which institutions had either a negative effect on growth or no effect at all.

Growth research and the assessment of the role of institutions will continue at BOFIT, where there are a number of related studies currently under way. Jenni Pääkkönen's study, due for release shortly, compares growth in Chinese regions relative to production structures. The study shows that economic deregulation has particularly benefited industrialised regions, whose economic well-being is converging. Originally agricultural regions that have become industrialised during the process of transition also grow faster than others, gradually catching up on areas that industrialised earlier. If regional differences are excluded, non-industrialised areas lag behind industrialised ones.

Jenni Pääkkönen

Conferences and seminars

On 4–5 June 2009, the Research Unit and SUERF (Société Universitaire Européenne de Recherches Financières) will jointly host a conference entitled 'Housing markets – A shelter from the storm or cause of the storm?' The preliminary programme is available at http://www.bof.fi/en/tutkimus/konferenssit/tulevat_konferenssit/suerf2009.htm.

The 10th annual Bank of Finland/CEPR conference entitled 'Credit crunch and the macroeconomy', this time arranged jointly with the Cass Business School, will be held in Helsinki on 15–16 October 2009. The call for papers is open until 30 June 2009 at http://www.bof.fi/en/tutkimus/konferenssit/tulevat_konferenssit/CEPR2009.htm.

Bank of Finland Research Seminars:

Thursday, 7 May 2009, 13.30–15.00. Prof. Kai Leitemo. Norwegian School of Management. The prize puzzle: Mixing the temporary and permanent monetary policy shocks.

Wednesday, 3 Jun 2009, 9.00–10.15. Rauhankatu 19 Auditorium. Prof. Viral Acharya. Stern School of Business, New York University. Restoring Financial Stability: How to Repair a Failed System (Policy recommendations from NYU Stern in a forthcoming book).

Please register in advance via Marjut Salovuori at seminars@bof.fi. For further information visit the seminar site at http://www.bof.fi/en/tutkimus/konferenssit/tutkimusseminaarit/.

BOFIT seminars:

Tues 12, May 2009, 10.30. Christophe J. Godlewski (University of Strasbourg and BOFIT), Zuzana Fungacova (BOFIT) and Laurent Weill (University of Strasbourg). The stock market response to debt financing announcements in Russia.

Tues 2, June 2009, 10.30. Michael Funke (Hamburg University and BOFIT). Economic growth across Chinese provinces: In search of innovation-driven gains.

Tues 9, June 2009. William Pyle (Middlebury College and BOFIT). Industrial land: Russia's forgotten factor.

For further information please visit the seminar site http://www.bof.fi/bofit_en/tutkimus/seminaarit/tiistai.

Please register in advance via Liisa Mannila (firstname.lastname@bof.fi, + 358 10 8312268).

Recent Bank of Finland research publications

Bank of Finland Discussion Papers

Iftekhar Hasan – Michael Koetter – Michael Wedow: Regional growth and finance in Europe: Is there a quality effect of bank efficiency? BOF DP 13/2009.

Mikael Juselius – Moshe Kim – Staffan Ringbom: Do markup dynamics reflect fundamentals or changes in conduct? BOF DP 12/2009.

Jim Lee – Patrick M Crowley: Evaluating the stresses from ECB monetary policy in the euro area, BOF DP 11/2009.

Risto Herrala: Credit crunch? An empirical test of cyclical credit policy, BOF DP 10/2009.

Juha Kilponen: Euler consumption equation with non-separable preferences over consumption and leisure and collateral constraints, BOF DP 9/2009.
Giovanni Ganelli – Juha Tervala: Public infrastructures, public consumption and welfare in a new open economy macro model, BOF DP 8/2009.
Bill B Francis – Iftekhar Hasan – Xian Sun: Political connections and the process of going public: evidence from China, BOF DP 7/2009.
Mervi Toivanen: Financial interlinkages and risk of contagion in the Finnish interbank market, BOF DP 6/2009.

BOFIT Discussion Papers

Balázs Égert: Dutch disease in former Soviet Union: Witch-hunting? BOFIT DP 4/2009.
Laurent Weill: Does corruption hamper bank lending? Macro and micro evidence, BOFIT DP 3/2009.
Jin Feng, Lixin He – Hiroshi Sato: Public pension and household saving: Evidence from China, BOFIT DP 2/2009.
Jenni Pääkkönen: Economic Freedom as a Driver for Growth in Transition, BOFIT DP 1/2009.

Forthcoming publications

Bank of Finland Discussion Papers

Juha Kilponen –Juuso Vanhala: Productivity and job flows: Heterogeneity of new hires and continuing jobs in the business cycle.
Martin T Bohl – David G Mayes – Pierre L Siklos: The quality of monetary policy and inflation performance: globalization and its aftermath.
Leonardo Becchetti – Andrea Carpentieri – Iftekhar Hasan: The determinants of option adjusted delta credit spreads: A comparative analysis on US, UK and the Eurozone.
David G Mayes: Early intervention and prompt corrective action in Europe.

BOFIT Discussion Papers

Rajeev K. Goel and Iikka Korhonen: Composition of Exports and Cross-Country Corruption.
Iikka Korhonen and Aaron Mehrotra: Real Exchange Rate, Output and Oil: Case of Four Large Energy Producers.
Zuzana Fungácová, Christophe J. Godlewski and Laurent Weill: Asymmetric Information and Loan Spreads in Russia: Evidence from Syndicated Loans.

Subscriptions to electronic alerts for Bank of Finland research publications

Bank of Finland website http://www.bof.fi/en/julkaisut/sahkoisten_julkaisujen_tilaaminen/index.htm
SSRN (Social Science Research Network) http://hq.ssrn.com/Pub_Login.cfm?iacm=y
RePec (Research Papers in Economics; NEP, new economics papers on central banking)
http://lists.repec.org/mailman/listinfo/nep-cba