# Unconventional monetary policy at the international, national and local level

av

## Martin Nordström

## Akademisk avhandling

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Opponent: Docent Jesper Lindé
IMF
Washington D.C., USA

Örebro universitet
Handelshögskolan
701 82 ÖREBRO

## Abstract

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This thesis is based on four essays. The first investigates time-variation in the relationship between short interest rates and consumption in the USA and Sweden. Results based on Bayesian VAR models indicate that the short rate ceased to respond to consumption shocks when constrained by the zero lower bound. Analysis using shadow rates indicate that the Federal Reserve was able to conduct effective monetary policy through unconventional instruments, but that the Riksbank was not.

The second essay investigates the relation between municipal and government bond yields during the time when the Riksbank conducted quantitative easing in terms of government bond purchases. According to the results the spread between municipal and government bonds increased on days when the Riksbank announced bond purchases. However, further analysis using VAR models suggests that this was reversed in the medium run and the spread decreased – at least temporarily.

The third essay studies the risks associated with municipal bonds. Due to previous bailouts it is not clear whether municipal debt has an implicit government guarantee. If there is a government guarantee municipal bonds should not be associated with credit risk, at least not in excess of government bonds. Analysis of the spread between government and municipal bonds, using a VAR model and looking at the variance decomposition and impulse-response functions, establishes that municipal bond yields are associated with credit risk.

The final essay studies the forecasting accuracy of the policy rate path published by the Riksbank. For the period 2010 to 2014, the forecasting accuracy of the policy rate path was significantly worse than that of a forecast implicit in market prices. The poor forecasting accuracy during this period is attributed to that the Riksbank during this period had incentive to present a higher than expected policy rate path. This because it had reason to want long run interest rates to be high in order to discourage high debt levels due to high housing prices.

*Keywords*: Bayesian VAR, Cointegration, Forecast evaluation, Municipal debt, Spread, Stochastic volatility, Sveriges Riksbank, Time-varying parameters, Unconventional monetary policy

Martin Nordström, Örebro University School of Business
Örebro University, SE-701 82 Örebro, Sweden, e-mail:
martin.nordström@oru.se