In my PhD thesis at the University of Groningen I studied the theoretical and empirical aspects of bank bailouts, credit risk connectivity among financial institutions and macroprudential regulation. Specifically, I studied the signaling effects of a systemic risk tax for banks about government’s bailout policy. In addition, I developed a structural credit risk model that allows for estimating whether and to what extent a bank enjoys implicit guarantees extended by a financial market’s regulator. In joint work I analyzed credit risk connections between financial institutions by estimating a joint co-crash probability of two institutions based on credit default swap spreads. Finally, we found that board managements’ risk-taking incentives pertain to future systemic risk formation. This result is based on the relation we find between board managements’ compensation schemes relate to systemic risk measures calculated for the Global Financial Crisis period.

In my job market paper “Dueling Policies” I investigate theoretically the interaction between two policy instruments for the banking sector, namely systemic risk taxation and constructive ambiguity about bailout policy. The motivation for this study lies in the recent surge in investigations of macroprudential policy intended to curtail systemic risk formation in the financial sector. It is generally acknowledged that bailout expectations may induce moral hazard in the form of excessive risk taking by banks. This issue implies that it can be optimal for the financial regulator to appear ambiguous about bailout policies. Systemic risk taxation is an instrument intended to directly induce banks to prefer uncorrelated investments, leading to lower systemic risk formation. However, I find that systemic risk taxation may also inform banks about the regulator’s objective to ensure financial stability and thereby its future bailout policy. In the model banks’ prior information about bailout prospects can be augmented with the observation of particular taxation levels. If this signaling effect of taxation is not taken into account, the systemic risk tax can exacerbate systemic risk formation, rather than curtail such risks. This result highlights the importance to consider policies’ interdependence when evaluating their effectiveness in a context where the regulator’s objective is to maintain financial stability.

In my current research I investigate whether and to what extent financial institutions benefitted from implicit guarantees prior to the Global Financial Crisis. Irrespective of whether these institutions are member of a formal safety net. In general financial institutions are more likely to receive bailout support if deemed too-big-to-fail or if they fail when many others are at the verge of doing so. The prospect of receiving bailout support may result in funding advantages for firms otherwise considered to be too risky for investment. I model the nature of this funding advantage as an implicit guarantee in an adaptation of Merton’s structural credit risk model as a contingent claim. In a different study we calculate network centrality measures to identify systemically important financial institutions and test if bailouts stabilized network neighbors. Results of this study suggest that it is not only the usual size or many distressed institutions that matter for being systemically relevant, but also how connected in credit risk institutions are with peer industry members.

In future research I would like to delve deeper into theoretical and empirical aspects of macroprudential policy interdependence, valuation of implicit guarantees, and microeconometrics of banking. Some of the issues I intend to study include the extent of sovereign governments’ implicit guarantees received from other member states in a currency union, such as the European Monetary Union. Indeed aspects such as size and credit risk connectivity are key determinants of the claim institutions and sovereigns hold on financial regulators and the study of the underlying channel is essential to gain an understanding between the financial sector and its regulator.