Opening Speech for the 21st Annual Research Conference "Unclogging the Credit Channel", 12-13 November 2018

Ladies and gentlemen, I am happy to welcome you at the 21st annual research conference organized by De Nederlandsche Bank.

This year the conference has a provocative title "Unclogging the credit channel" and aims at re-examining the link between monetary policy, bank lending, and the real economy.

The debate over the credit channel dates back to the 1980s. In those times, when life was simple and financial systems unsophisticated, economists believed that the effect of monetary policy could be magnified by a change in bank lending. The credit channel was perceived as an important mechanism through which monetary policy decisions are effectively transmitted to the real economy.

Forty years later things are no longer as simple. The global financial system is complex and interconnected due to various factors such as financial globalization, deregulation, innovation and increasing competitive pressure on financial institutions.

The evolution of the financial system, and specifically the banking sector, entails also the evolution of the credit channel. Against this background, I would like to briefly discuss two issues that I think the literature should address.

The first one is the link between the business cycle and the credit channel in the presence of widespread bank heterogeneity.

The conventional view is that in normal times larger, better capitalized, and more liquid banks are more resilient to monetary contractions as they can more easily substitute sources of external financing, absorb expected future losses, and divert liquidity to satisfy the rising demand for loans. As a consequence, monetary policy decisions are transmitted to the real economy mainly through small, illiquid, and poorly capitalized banks.

In periods of financial stress, the presence of economic and regulatory constraints might alter these patterns and reduce the effectiveness of monetary policy.

Related to this issue is the question whether the transmission of monetary policy through the credit channel differs between conventional and unconventional policies, and whether the effects of these policies differ across banks with different characteristics.

In a recent study Altavilla and co-authors examine European banks after the global financial crisis and look at their balance sheets and funding structure to answer these questions. They find that banks with a high level of non-performing loans and a low capital ratio were the most responsive to central bank credit easing and banks with higher uptakes in the credit easing operations reduced lending rates more than banks not participating in the program.

At the same time, non-standard monetary policy measures significantly compressed banks' lending margins. Changes in margins, in turn, might have adverse effects on banks' profitability and market value. The compression of lending margins is more pronounced for banks with a low level of capital, a higher exposure to sovereign debt, and a higher share of non-performing loans.

Thus, while non-standard measures reduced funding costs for some banks, they hampered banks' profitability, potentially making the banking system more vulnerable to shocks.

To promote financial stability, it is thus crucial to understand how to achieve an effective design of monetary policy and regulation in the presence of heterogeneous banks. This requires developing a theoretical framework that features, among others, the trade-offs that I just discussed.

The second issue in the modelling of credit channel, that I would like to discuss, refers to the presence of non-bank financial intermediation or, as commonly known, shadow banking. The growth of U.S. shadow banking assets in recent years has exceeded the growth in traditional banking. As shadow banks compete with commercial banks in many traditionally banking businesses, their role in shaping the credit channel cannot be ignored.

The growth of the shadow banking sector has two main implications. First, it enables borrowers to bypass banks to get loans. The result is a shrinking share of bank credit. Second, the shadow banking has led to a wider access to credit by a larger part of population.

The share of non-bank financial intermediaries is likely to rise in the upcoming years. This is related to the "boundary problem", as discussed by Charles Goodhart. According to Goodhart, effective regulation penalizes financial intermediaries within the regulated sector compared to the unregulated ones. This leads to a switch of business and substitution towards the unregulated sector, causing an expansion of shadow banking. Monetary policy can also induce such a boundary problem. Recent studies document that monetary contraction results in a substitution of bank lending with non-bank financing, as commercial bank assets drop while the assets of shadow banks expand, pushing credit intermediation towards the unregulated sector.

The endogenous shift between traditional and shadow banking raises concerns about potential risks of such a hybrid financial system and challenges it poses for policy makers.

Indeed, the role of shadow banking for monetary policy transmission has not been fully explored yet. Due to the perceived special role of bank lending, the credit channel has only been examined in the context of traditional banks. Gerald Corrigan argued in 1982 that banks are special for three reasons: (1) they offer transaction accounts, (2) provide liquidity for other institutions, and (3) they intermediate in the transmission mechanism of monetary policy. The assumption of specialness is also grounded in the view that bank loans cannot be easily substituted by nonbank loans or by credit market instruments.

Recently, this "specialness" has faded due to the development of a secondary loan market. The extension of the public safety net after the crisis to a broader range of financial institutions further weakened the banks' specialness. This puts the credit channel into a new perspective where shadow banking plays a relevant role as a substitute or perhaps also as a complement to traditional banking.

Researchers find that DSGE models featuring heterogeneous financial intermediaries enhanced with a shadow banking system can replicate the financial boom-bust cycle dynamics observed before the crisis. These models predict a large increase in leverage before the crisis due to the combination of a too-low-for-too-long interest rate policy and an expansion of shadow banking activities.

The modelling of shadow banking in monetary policy transmission follows two directions. In the first, models with heterogeneous banking include commercial banks and ABS issuers (or shadow banks) acting on the credit market and find heterogeneous responses of financial intermediaries to a monetary policy shock.

Monetary contraction reduces commercial banks' net worth and lending, while shadow banking expands thanks to increasing demand from commercial banks for tradable ABS.

The second strand of modelling employs bank competition models with product heterogeneity for bank deposits where commercial and shadow banks compete in the deposit market. As shadow banks are unregulated, they can pass rate hikes on to depositors after monetary contraction. This drives more deposits into the shadow banking sector and weakens the effectiveness of monetary policy.

Our conference hosts an outstanding group of speakers whose research will help to shed light on these open issues.

The agenda includes papers on a variety of topics, starting from the role of the credit channel in the transmission of conventional and unconventional monetary policy and ending with macroprudential regulation and its impact on bank lending. We also have papers discussing self-fulfilling beliefs and expectations formation in credit markets. We will hear about the role of bank recapitalizations and shadow banking in monetary policy transmission. We will learn about credit market frictions due to firm-defaults. In addition, there will be a policy debate on the topic and two keynote speeches from distinguished economists in the field.

I am convinced that these contributions will add to the academic and policy discussion. DNB is proud to provide the forum for this discussion.

Let me again welcome you all to De Nederlandsche Bank. Thank you for coming.

I wish you a very fruitful conference.