## Economies of Scale and Scope in Banking: Effects of Government Intervention, Corporate Strategy and Market Power (Summary in English, A4)

This dissertation estimates economies of scale and scope in the banking sector and discusses the role of government intervention, corporate strategy and market power.

Chapter 2 is a literature survey on scale and scope of the financial sector on a sector level as well as on the level of individual financial intermediaries. The literature tends to find the financial sector adds to economic growth up until a certain size, while risk is not adequately accounted for in the national accounts. Generally, the literature tends to find economies of scale and diseconomies of scope.

Chapter 3 investigates the presence of economies of scale and scope and attempts to disentangle the effects of implicit governmental subsidies using a dataset of approximately 18000 European bank-level observations between 2002 and 2011. Implicit governmental subsidies are proxied through the difference between a bank's credit rating with and without the possibility of external (governmental) support. Economies of scale are found even when accounting for ratings uplifts. When ratings uplifts are accounted for, banks with a ratings uplift have lower economies of scale than banks without, but both types of banks still experience economies of scale. Economies of scope are found to be positive as well, but are sensitive to the model specification.

Chapter 4 is a case study on ABN AMRO in the period 1997-2007. It is found that few synergies were established between the different countries in which the bank operated and finds that the wholesale division underperformed relative to other parts of the bank. Even though the wholesale division underperformed, it grew faster than other divisions in terms of assets. An explanation for this growth is found in the managing for value system put in place, which might have favored transaction banking activities over relationship banking activities. Meanwhile, even though the bank increased its focus over time by selling off branches in countries where ABN AMRO had little presence, it remained one of the most spread out banks in the world. The bank seemed unable to create enough synergies to compensate for the costs of running a diffuse organization.

Chapter 5 studies the mortgage market in the Netherlands. Specifically, this chapter addresses the competitive situation in the Netherlands after the European Commission implemented price leadership bans on three of the largest mortgage suppliers in the Netherlands. Increases in cost factors and concentration matter, and a crucial role is found for the price leadership bans implemented by the European Commission. Using a dataset of approximately a million observations in rough data, it is found that the price setting bank became more important in interest setting behavior, which is theoretically consistent with the behavior following a price leadership ban.