Chapter 1

Introduction

1.1 Motivation

The thesis focuses on the interaction between banks and the Swiss economy. The economy depends on a healthy financial system in order to guarantee intermediation, maturity transformation, credit allocation, payment mechanism and borrower screening services. The banking system provides a key step in the monetary policy transmission channel. If banks malfunction, surplus capital does not reach investment opportunities anymore. If banks curb their credit supply, the ensuring credit crunch removes liquidity from firms. Firms have to postpone investment decisions due to the lack of liquidity and capital. But the banking industry is also influenced by the economy. If economic conditions worsen the quality of debtors declines, the default on loans increases, banks have to write-off their assets and might themselves become endangered by bankruptcy.

The studies conducted in this thesis are based on a newly constructed data base, containing balance sheets and profit & loss accounts for all Swiss banks from 1906-2007. The construction of the banking data set is described in Chapter 2. The data set consists of commercial bank balance sheets collected by the Swiss National Bank (Schweizerische Nationalbank, 1907-2008); approximately 250.000 observations are available. Individual bank information has been aggregated into banking groups (big banks, cantonal banks, local banks, co-operatives, wealth management banks, foreign banks, commercial trade banks, customer loans banks, private banks, etc.). In terms of the size of balance sheets, the Swiss banking system is dominated by the UBS and the Credit Suisse. At the end of 2007, their assets amounted to 2342 billion CHF corresponding to two thirds of total bank assets. Cantonal banks had a market share of roughly 10 percent, which leaves the other banks one quarter of assets.

Figure 1.1: Market Shares Balance Sheet Total

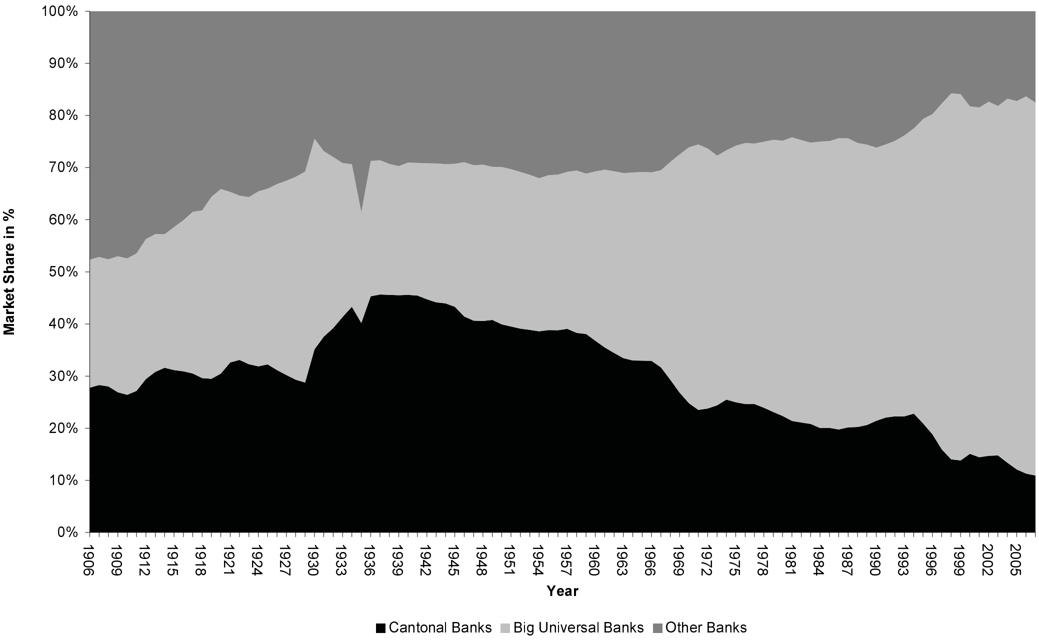

Figure 1.1: Market shares for balance sheet total from 1906-2007.

Banking has a long tradition in Switzerland[1]. Geneva and Basel have been major financial centers since the late Medieval period. In the 18th century, the Geneva bankers were important financiers of the French monarchy. The French Revolution triggered several waves of capital flights out of France, leading to a number of foundations of private banks in Switzerland that still exist today, such as Pictet, Lombard, Odier, Darier et Hentsch.

The origins of the modern Swiss banking system lie in the early 19th Century when a great number of savings banks were established. In the middle of the century, investors in Zurich, Winterthur and Basel founded several commercial banks from which the the big universal banks emerged. The Credit Suisse is a direct descendant of the Schweizerische Kreditanstalt, which was founded in 1856. In the early 1990s, it incorporated two other big universal banks: Bank Leu & Cie and Schweizerische Volksbank. UBS is the result of the 1998 merger between the Schweizerische Bankgesellschaft (SBG) and the Schweizerischer Bankverein (SBV), both of which were founded in 1862 and 1872 respectively. In the course of its history, the SBG bought the Eidgenössische Bank in 1945, the SBV the Basler Handelsbank in the same year.

[1]For the following see Cassis and Collier (2006).

The creation of the cantonal banks started in the 1830s, but the breakthrough occurred in the 1860s, when owners of small and medium businesses demanded banks for their own needs as the big banks were limited themselves to giving credit to the large Swiss industrial firms and railway companies. Almost all cantonal have state guarantees. The most important cantonal bank is the Zürcher Kantonalbank, which has been in operation since 1870.

Today the Swiss financial industry has a large leverage on international markets, as being the largest wealth management center worldwide. The financial centers Zurich, Basle, Geneva and Lugano have a long tradition, the stability of the political system and the high quality of banking data motivate the use of Switzerland as a case study.

Figure 1.2: Balance Sheet Total, 1906-1965

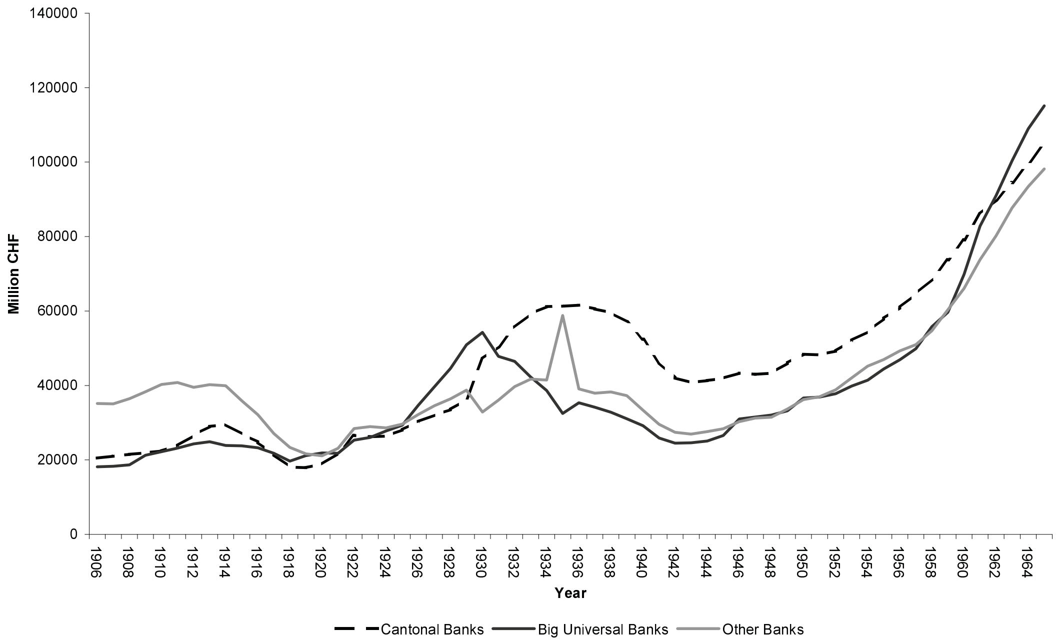

Figure 1.2: Balance Sheet Total from 1906-1965 in real (2005) million Swiss Francs.

Up until the 1960s, the size of the balance sheets of the big banks and the cantonal banks was roughly the same. In this decade, however, the big banks started to expand their international operations and to build up their domestic retail business. The modern structure of the Swiss banking system is therefore a result of recent events. Traditionally, no Swiss bank was "too big to fail". This fundamentally changed in the last decades and it has had profound consequences for the character of Swiss banking crises.

Figure 1.3: Balance Sheet Total, 1966-2007

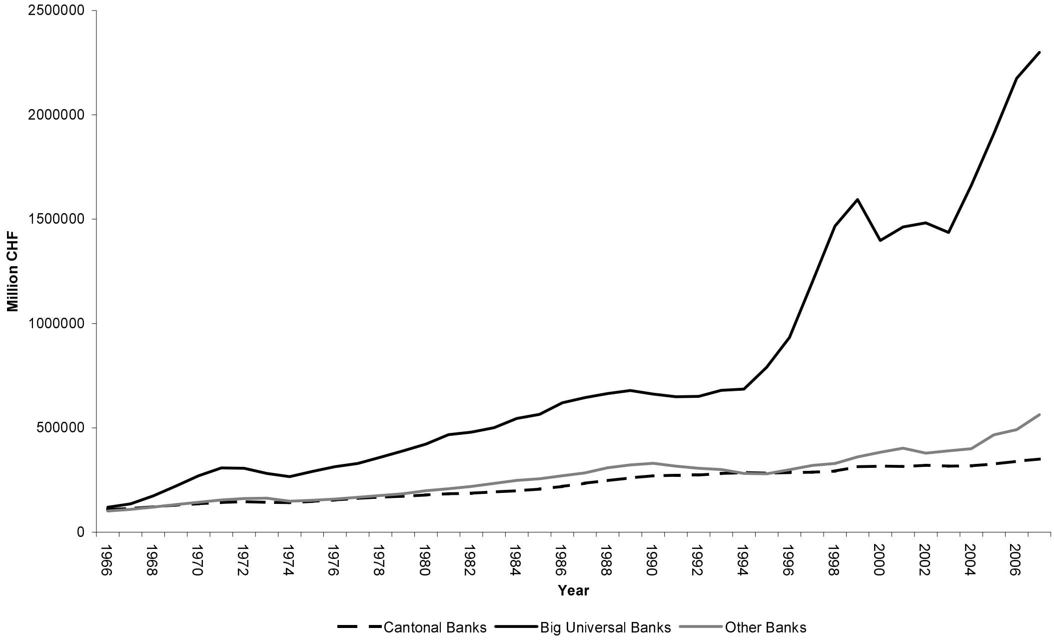

Figure 1.3: Balance Sheet Total from 1966-2007 in real (2005) million Swiss Francs.

To approach the central question of how banks and the Swiss economy interfere with each other, three directions are proposed: Firstly, by looking at intermediation efficiency the banking industry is investigated from a productivity perspective to answer questions about the stability of the financial system and the determinants of banks success in form of return on equity (ROE). Secondly, by building on the methods used to identify banking efficiency scores, dynamic efficiency over time is estimated. By looking at these time-varying results banking crisis can be identified. These are put in historical perspective. Using the identified periods of banking distress, time-varying effects of banking crises on GDP growth are estimated. Thirdly, to round up the discussion the influence of adverse shocks to explain reductions in macroeconomic volatility is studied in a model which incorporates a financial sector into the setup.