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Why do banks promise to pay par on demand?

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Abstract

We survey the theories on why banks promise to pay par on demand and examine evidence on the conditions under which banks have promised to pay the par value of deposits and banknotes on demand when holding only fractional reserves. The theoretical literature is divided into four strands: liquidity provision; asymmetric information; legal restrictions; and a medium of exchange. We assume that it is not zero cost to make a promise to redeem a liability at par value on demand. If so, then the conditions in the theories that result in par redemption are possible explanations why banks promise to pay par on demand. If the explanation based on customers' demand for liquidity is correct, payment of deposits at par will be promised when banks hold assets that are illiquid in the short run. If the asymmetric-information explanation based on the difficulty of valuing assets is correct, the marketability of banks' assets determines whether banks promise to pay par. If the legal restrictions explanation of par redemption is correct, banks will not promise to pay par if they are not required to do so. If the transaction explanation is correct, banks will promise to pay par if the deposits are used in transactions. We examine the history of banking in several countries in different eras: fourth century Athens, medieval Italy, Tokugawa Japan, and free banking and money market mutual funds in the United States. Each of the theories explains some of the observed banking arrangements and none explains all of them.

Keywords: Banking panics; Suspension of payments; Banking history; Money market funds

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1. Introduction

Banks promise to pay the par value of certain liabilities on demand with fractional reserves of the assets promised. It is trivially obvious that, due to gamblers' ruin, no bank holding fractional reserves can expect to honor this promise forever. No bank customer can expect it to be honored always either. In addition, the consequences – banking panics – are not trivial. In the United States, banking panics happened during the free banking and National Banking periods and at the start of the Great Depression. These are far from unique historically, and banking crises in emerging countries are more recent examples of related events.[1]

Given that these things are so, why do banks promise what they cannot deliver in the first place?

It is possible that banks promise to pay par on demand because depositors want this contractual agreement. There are at least four possible reasons for this desire. Depositors may demand a constant par value because this makes their deposit balances more predictable under typical circumstances, thereby increasing the liquidity of deposits compared to assets that have a longer maturity. At many times and places, banks have held largely nonmarketable assets; hence, customers cannot easily assess the assets' market values. Under these circumstances, deposit values that vary with the value of banks' assets may not be a feasible market equilibrium and redemption on demand can keep the bank from dissipating the depositors' wealth by exploiting superior information. Depositors may want a constant par value because it is more convenient when using deposits in transactions, a point that may be related to the predictability of balances in the liquidity explanation. Alternatively, banks may make this promise simply because they are required to do so by law and such promises would not occur without that requirement.

In this paper, we survey theories about banks' promise to pay par on demand to determine the empirical predictions about when financial intermediaries will promise to pay par on demand. We assume that it is not costless to make a promise to redeem a liability at par value on demand. While the theories are highly stylized, there are conditions leading to par redemption in the theories and we interpret those conditions as possible explanations why banks promise to pay par on demand.

We show that these theories are informative for understanding banking arrangements, making predictions about when banks will promise to pay par on demand and when they will not make such promises.

There are two alternative interpretations of the theories, which we characterize as the *strong* and *weak* versions of the theories. In the strong interpretation of the theories, the theories make a prediction, namely that promises to pay par on demand will occur *only* under conditions consistent with the theory. This is similar to some theories in economics and finance, such as the law of demand which predicts that a higher price will decrease quantity demanded. Alternatively, the theories can be interpreted as making weak predictions, sometimes explaining why banks promise to pay par on demand but one theory need not explain all of the observations. It could be argued that a non-redundant theory will explain something not explicable by the other theories.

After this survey of the theoretical literature, we examine the history of banking in several countries in different eras: fourth century Athens; medieval Italy; Japan during its period of "seclu-

[1] For United States history, Dwyer (1996) summarizes some banking panics before the Civil War in the United States, Sprague (1910) summarizes banking panics in the National Banking period, and Friedman and Schwartz (1963) analyze the banking panics at the start of the Great Depression. Over 8000 banks failed in the U.S. from 1929 to 1933 (Friedman and Schwartz, 1963). Banking problems have not ended with the establishment of central banks. Lindgren and Saal (1996) indicate that 73 percent of the IMF's member countries suffered banking crises between 1980 and 1996.