

# Limited Credit Records and Endogenous Credit Cycles\*

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## Abstract

In a dynamic credit market model with unknown borrowers' types a credit bureau reports positive and negative records about their past for a limited timespan.<sup>1</sup> A stationary equilibrium with lending exist only if negative records are kept sufficiently long while positive ones are erased soon enough. If these conditions are not satisfied and the average quality of borrowers is high, the credit market experiences endogenous and persistent lending cycles in equilibrium in the absence of any aggregate shocks. Cycles stem from the amount of information available at the credit bureau, and corresponding endogenous changes in optimal lending standards for borrowers with no observable records: switches between phases of

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<sup>1</sup>Retention limits vary across countries and records, and these limits have sizable short-term effects.

lending and no-lending to these borrowers generate large fluctuations in aggregate lending. We characterize cycles and their relation with records retention limits. When cycles and the stationary equilibrium co-exist, the latter delivers higher welfare.

*Keywords:* Credit records, lending standards, lending booms, credit bureaus, credit registers, data retention, endogenous cycles, deterministic cycles, financial stability, privacy rules.

*JEL classification:* D82, D53, E32, E44, G20, G28, K35.

## Introduction

The recent financial crisis highlighted the importance of financial markets and financial frictions for modern economies. It has also once again suggested that financial markets may be the very origin of economic instability and fluctuations, and not only amplifiers of shocks in fundamentals as in most of the classic literature surveyed e.g. in ?.

In this paper we present a stylized continuous-time model of a credit market where an informational friction between lenders and borrowers combined with common institutional features of credit markets generates fully endogenous, deterministic and persistent credit cycles. The informational friction we focus on is incomplete information about borrowers' quality. The institutional feature that interacts with this friction and partially solves it is a standard information intermediary, like a credit bureau, that displays records of borrowers past performance for some time and then deletes them. This is an important feature in real world credit markets. In almost all countries a private or public credit bureau provides access to borrowers' credit histories, and either for internal policies or for regulatory reasons this access is limited in time: after a certain time, each borrower record are removed. Retention limits vary wildly across countries, markets, and type of records, and a growing amount of empirical evidence indicates that they are binding; i.e. other information sources do not make them irrelevant, as the expiration or changes of these limits have economically large effects on credit market outcomes and beyond.