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The Advent of the Federal Reserve and the Efficiency of the Payments System: The Collection of Checks, 1915–1930

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This paper investigates whether the services of the Federal Reserve System improved the efficiency of the system in the United States for collecting checks relative to the efficiency of the system used by banks just prior to the formation of the Federal Reserve. There are two types of evidence that the Fed's services improved efficiency. First, the Reserve Banks quickly became major processors of interregional checks, even though banks could have continued to use the prior payments arrangements. The timing of the growth in Reserve Bank collection services was not consistent with the view that banks simply took advantage of a subsidy provided by the Fed. The share of checks collected by the Reserve Banks increased rapidly during the period when the Fed charged banks fees to cover their collection expenses. Second, declines in the ratios of cash to total assets of banks can be attributed to the development of the Fed's check-collection services.

Key Words: Federal Reserve; payments system; efficiency.

The effects of the founding of the Federal Reserve System have received a great deal of attention in the economics literature. Economists have focused primarily on macroeconomic effects, like the rate of inflation, the frequency and severity of recessions and depressions, and seasonal patterns in interest rates.[2] This article examines the effects of the Fed's founding on the operation of the nation's system for collecting checks. Most of the historic writing on the Fed's check-collection services focused on the failure of the Fed to impose the collection of checks at par as the national standard for the banking industry. The

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[2] See references in Miron (1986). Also see Mankiw, Miron, and Weil (1987, 1990) and Fishe and Wohar (1990).

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banks that refused to pay the Fed at par for checks drawn on the accounts of their customers prevailed in a long legal battle.[3] Some banks continued to operate as nonpar banks until the early 1980s. This article uses a different standard in judging the success or failure of the Fed's involvement in the operation of the check-collection system: the effects of the Fed's payment services on the efficiency of the check-collection system. Analysis of efficiency focuses on the costs of banks in processing payments. In a more efficient payments system, banks are able to process the same payments at lower costs.

A broad assessment of the effects of Reserve Bank services on the efficiency of the payments system would consider four questions.

1. Is there evidence to support the hypothesis that Reserve Bank services improved the operation of the system for collecting checks relative to the way the system functioned just prior to the formation of the Fed?
2. If Congress wanted to improve the efficiency of the payments system in 1913, alternatives to government provision of payments services would have included nationwide branch banking and reform of the legal foundation for check clearing. Would these alternative approaches have improved the efficiency of the check-collection system more than authorization for the Fed to provide collection services?
3. Over the years since its founding, has the Fed enhanced or retarded innovations that improve the efficiency of the payments system?
4. Does the Fed still have a valid role as a provider of payments services in the current environment of nationwide branch banking?

This article has a narrow focus, examining only the first of these questions. Evidence that Reserve Bank payment services improved the efficiency of the check-collection system relative to its operation just prior to the formation of the Fed would not be sufficient for answering the other questions. Such evidence, however, would answer an important question about the early impact of the founding of the Fed on the economy.[4]

This article examines the payments system before Congress established the Fed, describes the legal foundation of the Fed's collection services, and traces the development of Reserve Bank services. Efficiency is defined, and a simulation exercise is used to identify testable hypotheses about the effects of Reserve Bank collection services on efficiency. The empirical evidence is found to be consistent with the view that Reserve Bank collection services improved the efficiency of the system for collecting checks.

[3] For several sources, see Jones (1931), Spahr (1926), Tippetts (1929), and Vest (1940).

[4] Lacker, Walker, and Weinberg (1999) conclude the Reserve Bank services reduced the efficiency of the payments system.