The authors also point out that a little known aspect of Obamacare is that it levies a 0.9% income tax and 3.8% tax on asset income on single workers making over \$200,000 per year and married workers making over \$250,000 per year. This is a large enough tax increase to negate the 2004 Bush tax cuts on individuals at this income level, which makes it less likely that repealing the Bush-era tax cuts can help close the fiscal gap.

The book is outstanding in its presentation of the numbers and laying out the case that something must be done, and soon. It is also nice that the authors provide some concrete proposals that actually close the fiscal gap. This book is definitely a "must read" for anyone interested in the budget deficit because balancing the budget cannot be seriously discussed without discussing how to reform entitlements.

CHRISTOPHER C. DOUGLAS

University of Michigan-Flint

Birth of a Market: The U.S. Treasuries Securities Market from the Great War to the Great Depression. Kenneth D. Garbade. Cambridge, MA: The MIT Press, 2012. Pp. xi, 393, \$50.00.

In the interwar period in the United States there was tremendous change in a number of facets within the society and the economy. While in some of these areas the change was fleeting, in other areas the change was more lasting when it led to the establishment of an infrastructure that would be heavily relied upon in the second half of the twentieth century. In Kenneth Garbade's "Birth of a Market: The U.S. Treasury Securities Market from the Great War to the Great Depression" the theme of great and lasting change initiated during the interwar period is explored in the market for United States Treasuries. It doesn't take much for Garbade to illustrate the dramatic change that occurred during the twentieth century in the United States Treasury market. Whereas before WWI there was only \$1 billion of outstanding treasury debt with 80% of it held by banks, by 2009 there was \$12.3 billion in outstanding treasury debt with over half of it owned by the public.

Garbade contends that the interwar period was a time when all but one of the central features of the present-day Treasury bond market were first used. These features included auctions offered in a regular and predictable fashion, the integration of cash and debt management by the Treasury

Department, and the delegation of debt management responsibility from Congress to the Treasury Department. Garbade's 24-chapter text is divided into five sections. Section I sets the stage by discussing the government's financing and management of debt before WW I. Section II illustrates how WW I served as a self-described inflection point where the magnitude of issued securities increased dramatically and the Treasury Department experimented with methods of issuing debt and financing the government. Section III discusses how the debt accrued during WW I was managed and partially paid down. Section IV deals with the financing of large deficits during the Great Depression and the refinancing of debt accumulated during WW I that would be delayed in being repaid. Section V deals with issues faced in the decades after WW II.

With regards to auctions of treasuries in a regular and predictable fashion, the auction device had been used before WW I but only when specific projects requiring debt financing emerged (such as the building of the Panama Canal). The auction device was abandoned during WW I, in an environment where the financing would have to come from domestic sources and where it remained to be determined how much of the war would be paid with taxes and how much of it would be financed by borrowing. The \$25 billion in war spending not financed with taxes was too large to be purchased by banks alone. Additionally, Congress wanted the debt to be purchased by individuals to give a public a voluntary stake in the funding of the war. To make this debt understandable to the public, there was a fixed price to the securities. With the war eventually won in 1919, the focus once prosperity returned was to retire the debt by 1945. Garbade outlines how the Treasury Department faced the new challenge of transitioning from wartime where there was the sale of unlimited quantities of debt sold at a fixed price to peacetime where fewer debt securities were sold and the debt overall had to be managed. This prompted the revival of the auction as a way to extend the maturities of debt originally issued during the war and lower the cost of the debt. Despite these strengths of the auction and the perception at the time that the pricing mechanism was a success, the failure of an auction in 1935 led to Treasury Secretary Morgenthau abandoning it. Garbade's analysis shines in explaining why this auction failed. Garbade shows the auction offering of bonds failed because the auction called for regular and predictable offerings while there was pressure to raise funds only as needed. The next auction offering of bonds wouldn't occur until the 1970s.

In terms of debt and cash management, Garbade describes how the Treasury Department throughout the 1920s and 1930s expanded dramatically their expertise. The debt offerings and quarterly tax payments meant that the flow of funds and the retirement of mature debt were all irregular. The Treasury Department was able to resolve this with the sale of short-term certificates of indebtedness and the redeposit of tax collections and security sales into Treasury accounts at banks. These actions made the management of the government funds more effective and would continue to be used to smooth cash flows.

Finally, the interwar period was a time when Congress slowly relinquished its control over the debt to the Treasury Department. Before WW I Garbade shows how Congress authorized each issuance of the debt, the maturity, the coupon rate, and the price it was to be sold to the public. During WW I, the Congress allowed the Treasury Department to establish the maturity of the debt. After the war, the Treasury Department could set the interest rate as well. Garbade explores this control over the debt further as he discusses the fact that whereas at the start of the Depression Congress had limits on bills and certificates outstanding, notes outstanding, and bonds outstanding, by 1939 the only limit placed by Congress was on total indebtedness. This shift of control aided the Treasury Department's management of the debt. Although not discussed by Garbade, the persistence of congressional control over total indebtedness would complicate the more recent management of the debt by the Treasury Department.

There were a number of times in reading the text where I could envision interesting research extensions (a feature in any well written and researched text). One such research extension would entail documenting the steep learning curve that was faced by the government as trust funds were established for the Society Security and unemployment insurance programs. The government previously had little experience with trust funds and then within a few short years needed to establish and finance trust funds covering most working-age Americans. The success in setting up these trust finds and the benefit to the Treasury Department in the trust funds purchasing nonmarketable debt set the stage for the establishment of the Medicare trust funds in 1965. Today government trust funds hold nearly \$5 trillion in total nonmarketable bonds (with the public holding the remaining \$12 trillion).

There are several areas of suggested refinement. The first would be to draw on the wider archival documents and literature that deals with the intense political, economic, and social changes that were occurring in the early twentieth century. Doing so would permit connections of influence to be drawn to the Federal Reserve which at the time was building up its portfolio of United States Treasuries, the growing thrift movement, and the challenges of the Great Depression for households, banks, and state and local governments. Second, I think Garbade would have very easily been able to draw out some international comparisons. To what extent did the development of the United States Treasury market draw from the presumably more developed public bond market in other countries? With the modern bond market largely coming into form as Europe and East Asia were recovering after WW I, did these countries receive assistance from the Treasury Department in re-establishing their own bond markets? Finally, while the last chapter gives a broad overview of the evolution of the market for United States treasuries in the second half of the twentieth century, there is a strong need to discuss the financing of WW II in particular. Did the financing model employed during WW I work with equal effectiveness during WW II? Were the lessons learned during the 1930s in managing the debt of WW I able to serve the United States well in managing the debt accrued during WW II?

Garbade's text, which would serve as an excellent supplement text in a financial history, public policy, or public finance course, also serves as an excellent reference text for federal public finance in the early twentieth century. The text was well written and specialized field knowledge is not needed to appreciate the impact of his work.

Although it exists as a historical narrative, Garbade's analysis encourages the asking of questions with current importance such as the significant ownership of the debt by government trust funds, Congressional involvement in the establishment of a debt ceiling, and the ability of the Treasury Department to manage a \$17 trillion debt. Given the importance of government debt in the global economy, Garbade's text will undoubtedly serve as a resource for decades to come.

TOM SCHEIDING

St. Norbert College