US government debt has always been different!

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Wharton Financial Institutions Center Conference: "Is US Government Debt Different?"

Philadelphia, May 4-5, 2012

I. A. Hamilton to R. Morris, April 1781

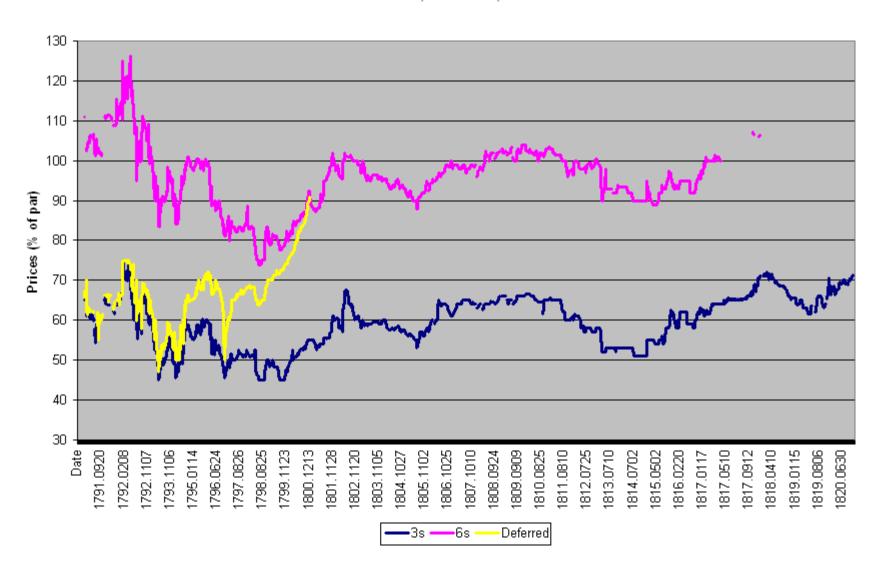
"A national debt if it is not excessive will be to us a national blessing; it will be a powerful cement of our union. It will also create a necessity for keeping up taxation to a degree which without being oppressive, will be a spur to industry."

Query: Has the US debt now become a cement of the world economy?

Hamilton's debt restructuring of 1790

- Old domestic debt in default voluntarily exchanged for a package of new debt made up of three new securities: a 6% bond, a 3% bond, and a 6% "deferred" bond paying no interest for ten years, then 6% (innovation: the first "zero coupon bond")
- The package yields 4%, instead of the promised 6% (innovation: a "haircut") because the Treasury was bare
- Principal is payable "at the pleasure of the government"
- State debts assumed into the national debt
- Interest in hard money or equivalents, paid quarterly, commences on Congress's debts in 1791, and on assumed state debts in 1792
- Birth of the US Treasury debt market

U.S. Debt Prices, New York, 1790-1820



Other innovations of Hamilton

- Call protection: no more than 2 percent of the debt could be called in and retired annually
- Sinking fund: a pledge to use surplus revenues to pay back debt, but perhaps more intended to allow Treasury interventions in the markets
- Debt as a near currency: US 6s could be used by investors to pay for shares of the Bank of the United States after the Bank's IPO in 1791
- Collateral: Hamilton encouraged banks to accept US debt as collateral for loans, which they quickly did

Hamilton intended US debt to promote import of foreign capital

- "It is ...evident that in a Country situated like the United States, with an infinite fund of resources yet to be unfolded, every farthing of foreign capital...is a precious acquisition." Report on Manufactures, 1791
- In short order, much of the US national debt was purchased by foreign investors, transferring European capital to the US
- US government debt was traded in European securities markets as early as the 1790s; the US made provisions to pay interest on it in European financial centers, increasing its popularity with foreign investors

U. S. Debt and other Stocks, by Type and Origin Held by Domestic and Foreign Investors, 1803/04, in Millions of Dollars

Security Type	Domestic	Foreign	Total
Sixes	\$16.572	\$11.662	\$28.236
Threes	7.843	11.230	19.072
Deferreds	6.991	6.657	13.648
Eights	5.239	1.228	6.467
Five and One-Half	.577	1.271	1.847
Four and One-Half	.125	.050	.176
Navy 6's	.687	.022	.709
Louisiana 6's	-	11.250	11.250
Total U. S. Debt	38.035	43.369	81.405
Bank of U. S.	3.800	6.200	10.000
State Banks	7.120	9.000	16.120
Insurance Cos.	10.500	.500	11.000
Turnpike, Canal	3.220	.180	3.400
Grand Total	62.675	59.249	121.925

II. US debt backs the first national currency starting in the Civil War era

- National Currency and Banking Acts of 1863-1864 create a new system of National Banks
- National Banks issue uniform national bank notes collateralized by US government debt purchased by them and held by the Comptroller of the Currency
- Banks also use US debt as collateral for Treasury deposits in banks
- State bank notes taxed out of existence, 1865
- All US paper currency—national bank notes and Treasury issues—effectively become liabilities of the US government after 1865

III. Three of four "pillars of the modern Treasury market" (Garbade) emerge during 1914-1939

- Treasury Tax and Loan system (TTL pillar) has its origins in World War I, with the establishment of War Loan Deposit Accounts
- TTL mitigates adverse effects on banks and money markets that might arise from sudden, large payments into the Treasury by creating a large network of financial institutions that receive tax and loan payments before they are called for by the Treasury

Regular and predictable offerings and issuance pillar

- Begins during 1920s with budget surpluses channeled into debt reduction in an orderly way featuring redemptions, early retirements, exchange offerings, cash redemptions, and regular quarterly refinancings
- Continues in 1930s when budget surpluses and debt reduction were replaced by the need to finance deficits and manage a growing debt
- During the 1920s-1930s era, the Treasury learns to tailor its offering to a wide spectrum of market participants

The Debt Ceiling

- The modern debt ceiling on total outstanding indebtedness also came in at the end of the 1930s, in 1939
- Prior to that time, Congress had established limits to the amounts of particular types of debt securities that could be issued, or that could be outstanding
- The modern debt ceiling reduced constraints on Treasury officials in deciding what types and amounts of securities to issue

Auction offerings pillar

- Auction offerings for "projects" such as the Spanish-American War and the Panama Canal were common before World War I, but the debt was small then and banks were the main buyers
- In WW I, auctions were abandoned in favor of fixedprice offerings because the goal was to attract a wide range of buyers, some of whom were afraid of auctions
- Auctions of Treasury bills begin in 1929; by the late 1930s T-bills are auctioned weekly, leading to a highly liquid, short-term money market
- The model of regular, predictable auctions is extended to T-notes and T-bonds in the 197s.

Later, more recent developments

- Fourth pillar of the modern Treasury market, the book-entry system, arrives in 1968
- TIPS (Treasury Inflation Protected Securities)
 arrive in the 1990s, an extension of the
 principle that the Treasury should tailor its
 offerings to the needs of a variety of potential
 buyers of its debt
- In 2012, the Treasury is considering issuance of floating-rate debt