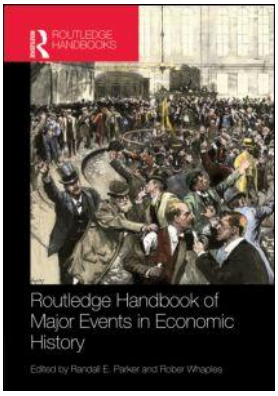


# Routledge Handbook of Major Events in Economic History

Randall E. Parker, Robert Whaples

# Gold resumption and the deflation of the 1870s

Publication details
https://www.routledgehandbooks.com/doi/10.4324/9780203067871.ch3
Richard C. K. Burdekin, Pierre L. Siklos
**Published online on: 28 Jan 2013**

# 3

# GOLD RESUMPTION AND THE DEFLATION OF THE 1870S

*Richard C. K. Burdekin and Pierre L. Siklos*

> The great fall in prices ... fell with especial severity upon the agricultural classes and other producers of raw material ... One class of persons in the United States has been unaffected by the fall in prices, that is the office holders ... Grover Cleveland has been getting $50,000 annually, but in view of the appreciation of the gold dollars, paid him quarterly, now $100,000. With this appreciated dollar he can and has bought real estate at the present depreciated price; result, when elected president a poor man, now a millionaire.
>
> (Fox 1897: 145–6)

## Introduction

The deflation experienced by the United States after the Civil War is notable not only for its long duration but also the controversy attached to the decision to resume specie payments only in gold, thereby abandoning the pre-war bimetallic system that had allowed for free coinage into both gold and silver. As gold's scarcity rose with country after country abandoning silver in favor of the yellow metal in the 1870s, its command over goods and services had to rise. Under the gold standard, the value of the currency is fixed in terms of gold and so the only way for gold to command more goods and services is for the aggregate price level to fall. Under a bimetallic system, however, the scope for coining silver makes monetary expansion possible even when gold's value is on the rise. The United States effectively demonetized silver in 1873, ensuring that when specie payments resumed in 1879 the dollar's value was fixed to gold and gold became the only universally acceptable metallic money. Repeated calls for restoring the monetary role of silver were made by those who felt that the abandonment of silver was responsible for the persistent deflationary pressures and the associated hardship experienced by debtors in general, and farmers and commodity producers in particular. Friedman (1992) and others suggest that the deflation could indeed have been mitigated, or even avoided altogether, if the 1879 resumption had not been preceded by the so-called "Crime of 1873" that demonetized silver. A brief listing of the major events leading up to the 1879 resumption follows in Table 3.1.

*Table 3.1* Chronology of key events, 1861–1879

| | |
|---|---|
| December 31, 1861 | Bimetallic standard abandoned as banks suspend specie payments in the face of the U.S. Civil War |
| February 25, 1862 | Legal Tender Act signed into law by President Abraham Lincoln providing for new fiat currency issues that became known as "greenbacks" |
| April 9, 1865 | General Robert E. Lee's surrender to General Ulysses S. Grant at Appomattox Court House effectively ends the Civil War |
| March 18, 1869 | Act to Strengthen the Public Credit pledges the government's faith to make provision at the earliest practicable period for the redemption of all outstanding notes in specie |
| February 12, 1873 | Coinage Act signed into law by President Ulysses S. Grant makes gold the only metallic standard in the United States and demonetizes silver |
| January 14, 1875 | Congress passes the Resumption Act Calling for all legal-tender notes to be redeemed in specie beginning January 1, 1879 |
| January 1, 1879 | Specie payments in gold resume with silver demonetized |

## Price-level determination under the gold standard

Under the gold standard, any increase in gold demand not matched by a similar increase in supply causes gold to be valued more highly in terms of other items in the economy. This, in turn, requires goods prices to fall as the aggregate price level is itself simply the inverse of the price of gold. This leaves a gold standard economy susceptible to deflation whenever there is upward pressure on gold prices. Prior to the Civil War, the United States' exposure to such deflationary effects was limited by the operation of a bimetallic monetary standard, whereby the mint stood ready to coin both silver and gold under a 16:1 ratio. Any increased scarcity of gold would cause its relative market value to rise and make an ounce of gold worth more than the sixteen ounces of silver at which it was valued by the U.S. mint. Although gold holders would be unlikely to take their holdings to the mint under these circumstances, holders of silver would find the mint's valuation attractive, and increased coining of silver would tend to offset any deflationary impetus arising from higher gold prices. This bimetallic standard was abandoned under the Coinage Act of 1873, however, which laid the foundation for a purely gold standard and, in turn, the accompanying deflation that continued until the mid-1890s. The Resumption Act of January 1875 formally laid down the terms of the new gold standard with redemption in gold to commence in 1879.

Although actual specie payments were postponed until January 1, 1879, increased gold accumulation in preparation for this resumption plus the boost to gold demand stemming from the outright demonetization of silver around the world was reflected in a rising market price for gold and ongoing deflationary pressures. The American move to demonetize silver was, in fact, part of a worldwide trend that began with Germany's decision to abandon silver in 1871. Oppers (1996) suggests that the ensuing scarcity of gold was not due to any prior shortage of gold or surplus of silver but rather triggered by the silver demonetization itself. Moreover,

> much of the deflation in the gold-standard countries in the 1870s … could have been avoided by continued free silver coinage in only two countries: France and Belgium.
> (Oppers 1996: 158)

Flandreau (1996) goes so far as to label the French move to limit silver coinage the "French Crime of 1873," with the *coup de grâce* following in 1876 when the Banque de France imposed a bill entirely suspending silver coinage in the country.

Anticipation of the pending resumption in the United States was reflected in a rising price of gold expressed in "greenback" paper currency, while the spread between U.S. gold railroad bonds and British consols declined by as much as 200 basis points between 1875 and 1879 (Obstfeld and Taylor 2003). Expectations of greenback appreciation may actually have set in even earlier with the Public Credit Act of March 18, 1869, guaranteeing eventual redemption and principal in gold (Calomiris 1988). Just as the greenback's value steadily rose against gold, the aggregate price level steadily declined through the 1870s such that the old pre-Civil War price level had already been achieved by the time that formal resumption was implemented in 1879 (Bayoumi and Bordo 1998). This overall price decline also reflected the monetary contraction that began right after the conclusion of the Civil War, with the money stock declining at a rate of approximately seven percent per year between 1865 and 1868 while prices fell by eight percent or more per year (Timberlake 1964). Outright declines in the money stock ended in February 1868 with a Congressional bill prohibiting any further immediate retirement of outstanding greenbacks. Even though this did not end the deflation, the rate of price decline moderated considerably after this.

## The persistent deflationary trend

The average rate of price decline between 1869 and 1879 was 3.8 percent per year. As shown in Table 3.2, this reflected modest money supply growth of 2.7 percent per year that was outweighed by stronger growth in output such that too little money was chasing too many goods.[1] Note that this nineteenth-century experience of an economy growing amidst deflation contrasts sharply with modern-day concerns sometimes expressed over the negative consequences of any deflation (Bernanke 2002). For example, many observers have repeatedly lamented the "lost decade" of deflation in Japan (Krugman 2009) where, incidentally, deflation was milder than in the United States over the 1870s period shown in Table 3.2 and Japanese output still grew – albeit at a slower pace than during the 1870s. As noted by Bordo and Filardo (2005), deflationary experiences are by no means all the same and there has been a wide spectrum of "good," "bad," and "ugly" deflations.

Returning to the decade of the 1870s, with money demand growing in conjunction with rising real output and income levels, money growth lagging behind output growth

*Table 3.2* Money, prices and output, 1869 vs. 1879

| | *1869* | *1879* | *Annualized Rate of Change* |
|---|---|---|---|
| Money Stock ($billion) | 1.298 | 1.698 | 2.7% |
| Price Index (1929=100) | 79.1 | 54.3 | –3.8% |
| Real Output ($billion, 1929 prices) | 7.36 | 14.52 | 6.8% |
| Real Output per Capita (1929 prices) | 188 | 295 | 4.5% |

Note: Money stock is valued in greenbacks at the mid-point of each year and real output is measured by net national product.

Source: Friedman and Schwarz (1963: 37)

implied also that money supply lagged behind money demand. In the 1870s, therefore, the shortage of money growth relative to the growth in output inevitably gave rise to deflationary pressures that reflected the ongoing monetary scarcity. Whereas such an outcome is possible under any monetary standard, we discuss below how the scope for monetary expansion to escape this denouement would generally be much greater under the pre-Civil War bimetallic standard than under the post-Civil War gold standard.

The continuing deflation after 1879 reflected a global pattern of rising gold scarcity that automatically produced falling aggregate prices in any nations that tied the value of their currency exclusively to gold. This deflationary trend continued until the mid-1890s, when new discoveries in South Africa, Western Australia and Alaska boosted gold supply just as the invention of the cyanide process was allowing for increased gold production out of existing reserves. There were numerous calls for a return to free coinage of silver throughout the deflationary episode, stemming not only from the silver-producing states in the western United States but also agrarian interests aggrieved at the burden of the deflation on farmers facing higher real debt burdens if prices fell while their obligations remained fixed in nominal terms. There was even a Greenback Party seeking a return to the unbacked fiat currency issues of the Civil War. The agitation for a move away from the rigidities of the gold standard fueled the presidential campaign of William Jennings Bryan, who advocated a return to bimetallism but was defeated in 1896 just as expanding gold production finally helped to reverse the longstanding deflationary trend.

Had the bimetallic standard been resumed after the Civil War, rather than being eliminated in 1873, increased minting of silver likely would have significantly reduced, perhaps even eliminated, the ensuing deflationary trend (see for example, Drake 1985, Friedman 1992, Velde 2002). Under a bimetallic standard, such stabilizing effects emerge as shifts in demand and supply that cause one metal to appreciate automatically trigger increased minting of the other (Dowd 1996).[2] As noted by Friedman (1992: 71), the U.S. deflation caused particular hardship in the agricultural sector because farmers are generally net debtors. Furthermore, agricultural prices fell more than in proportion with the aggregate price level. Although the U.S. aggregate price level declined by approximately 1.7 percent per year from 1875–1896, the wholesale prices of agricultural commodities are estimated to have fallen by as much as 3 percent per year (Friedman 1992: 70). The populist concerns expressed in many of the repeated congressional arguments for a return to bimetallism are exemplified in the remarks of Representative John H. Reagen of Texas on December 30, 1891:

> The passage of the act demonetizing silver caused a reduction in values of all property and products of about 33 per cent; it took from the people the use of about one-half of the metal money of the world; and it increased the burdens of all indebtedness from one-third to one-half.[3]

Another issue garnering support for the Free Silver movement was the shortage of small denomination coins. Gramm and Gramm (2004: 1127) note that

> at least part of the debt burden of farmers in the South and West was debt on account accumulated because of a shortage of denominations of money valued at a half a day's wages and less ... Paradoxically [they] were then, to some degree, debtors because of the dearth of silver coins and not advocates of silver coinage because they were debtors.

## Was resumption in gold inevitable?

Notwithstanding the importance attached to the 1873 Coinage Act today, it seemed to very much catch people off guard at the time. Not only was the demonetization of silver largely unknown until a year or two after the Act's passage but also many of those voting on the bill later claimed that they were unaware of its game-changing implications.[4] Confusion as to the implications of the 1873 Act is reflected in the fact that, nearly eight months after signing it into law, President Ulysses S. Grant seemingly alluded to the scope for resuming specie payments not in gold but in silver in a letter dated October 6, 1873:

> The panic [of 1873] has brought greenbacks about to a par with silver. I wonder that silver is not already coming into the market to supply the deficiency in our circulating medium. When it does come – and I predict that it will soon – we will have made a rapid stride toward specie payments. Currency will never go below silver after that.[5]

Silver had suddenly come into focus in the fall of 1873 owing to a shortage of greenback notes that were being hoarded in the midst of the financial panic in late September. There were even newspaper reports of workers in Pennsylvania and Ohio being paid in specie at this time on the grounds that it was easier to obtain than greenbacks. Greenback scarcity pushed up the currency's purchasing power to the extent that a dollar in silver would buy two percent less gold than a greenback dollar (see Anderson 1939: 305). Silver's relative cheapness made resumption in silver seemingly both feasible and expedient at this time and Anderson (1939) lays out multiple contemporary news reports that anticipated the U.S. Treasury paying out silver for greenbacks on a dollar-for-dollar basis. While inconsistent with the Coinage Act of 1873, this nevertheless suggests that the resumption of specie payments in gold was not inevitable and that silver continued to be viewed by many as a viable option.

Even after the 1875 passage of the Resumption Act, numerous Congressional bills seeking to restore silver's monetary role continued apace until, during the 1877–1878 Congressional session, the House passed a bill sponsored by Representative Richard P. Bland of Missouri providing not only for the re-monetization of silver but also free coinage of silver (Walker 1893). There seems little doubt that Bland was motivated not just by an interest in silver but also by a more basic desire to find some way to engineer monetary expansion. Among his February 21, 1878, remarks on the House floor, Bland stated: "If we cannot [get free coinage of silver] I am in favor of issuing paper money enough to stuff down the bondholders until they are sick."[6] Although Bland's free coinage provision did not pass the Senate, the resultant Bland–Allison Bill became the first of several measures providing for limited silver purchases that added to the circulating medium.

## The 1870s deflation in perspective

Consistent with the post-1870 U.S. deflation being a product of the rising price of gold, the United Kingdom similarly faced aggregate price declines averaging approximately 1 percent per year between 1873 and 1896. As with the U.S. case, real output continued to grow in spite of the persistent deflation. Capie and Wood (2004) also find that British price and interest rate series were relatively predictable over this period and that there was a close relationship between actual inflation and the inflation rate predicted by a simple autoregressive process. On the other hand, like most other gold bloc countries, the growth rates enjoyed by the United Kingdom and the United States accelerated after the deflation ended in 1896. Much debate has focused upon whether such step-ups in growth were coincidental or rather reflected the shedding of negative effects associated with the prior deflation. Although Bordo and Redish (2004) point to supply shocks being of greater importance to output than monetary shocks over the 1870–1913 period in both the United States and Canada, aggregate data do not, of course, enable us to assess the possible distributional effects of the deflation that seemed to fuel much of the unrest in the United States in the late nineteenth century. Important regional disparities surfaced at this time, with agricultural and commodity-producing states in the south and west suffering while other parts of the country thrived.

Concerns with price fluctuations under the gold standard certainly outlasted the nineteenth century deflation, with Irving Fisher (1913a, 1913b), for example, subsequently calling for an adjustable commodity-based dollar that would automatically offset any upward or downward pressure on its purchasing power. Whenever aggregate prices fell below target by one percent, for example, the dollar value of the resource unit would be raised by one percent – at the same time automatically lowering the number of resource units in the dollar. In case of deflation under the gold standard, a policy of setting the official gold price above the prevailing market level would be used to induce the public to exchange gold for currency and boost the money in circulation. Although Fisher envisaged stabilizing the price of a broad basket of commodities, Burdekin, Mitchener and Weidenmier (2012) show that simply stabilizing the price of silver may have been sufficient to stabilize the price level under this scheme.[7]

## Conclusions

Had the United States simply reverted to the pre-Civil War bimetallic monetary standard, the course of monetary history would have been very different. Instead of facing the same deflationary pressures experienced by all the members of the gold bloc in the late nineteenth century, the United States could have enjoyed more rapid monetary expansion arising from coining silver as the cheaper metal. This might have allowed the United States to escape deflation altogether. The implications for overall economic performance are less clear because the counterfactual case would require us to take a stand not only on the types of economic shocks that would follow a different set of policy choices but also on the question of whether other countries would also have made different monetary policy choices during this period (Siklos 2010). Although it appears that resumption in silver was more than just an academic possibility, and received serious consideration by the government in 1873, reversion to silver became increasingly unlikely over time as gold became the accepted international standard in all the major European economies by the end of the 1870s. This did not stop calls for free coinage of silver persisting for as long as the deflation endured, however, remaining a key component of the 1896 presidential race and the ultimately unsuccessful campaign of William Jennings Bryan.[8] Even though the economy continued to grow under deflation, the strains on at least certain parts of the economy seem undisputable and it is astonishing how much impact was had by a seemingly obscure Coinage Act that had initially largely escaped notice even by those involved in passing it. The story of the 1870s contains a theme that has often been repeated in economic history, namely that ideology is often a poor substitute for good judgment. This truism applies equally to the choice of monetary regimes.

## Notes

1 Alternative estimates by Friedman and Schwartz (1963: 39) suggest lower real output growth of 4.4 percent per year (2.0 percent for real output growth per capita) over this same period but still imply that money growth lagged behind.

2 A perennial criticism of bimetallism remains the problem that, unless these relative market values remain very close to the ratios laid down by the mint, it will not be possible for both metals to be widely in use at the same time, however (see for example, Laughlin 1901, Redish 2000). In practice, the old bimetallic system also appears to have relied upon monetary arrangements between the Bank of England and the Banque de France (Diebolt and Parent 2008). While agitation for silver did not lead to the restoration of a bimetallic standard, it did subsequently spur the adoption of a series of major silver purchase programs in the United States. The Bland–Allison Act of 1878 was followed by the Sherman Act of July 1890 that called for a doubling of the limited silver purchases undertaken under the 1878 Act.

3 Quoted in Barnett (1964: 179).

4 Walker (1893: 171*n*) adds that he was not aware of silver's demonetization despite lecturing on money at Yale University when the 1873 Act was passed and being in frequent touch with the banking community in New York.

5 Quoted in Anderson (1939: 305).

6 Quoted in Timberlake (1964: 29).

7 Other commodity-price targeting proposals and policies are reviewed in Burdekin (2007), along with the effects of the series of silver purchase acts enacted in the United States from the 1870s through the 1930s.

8 William Jennings Bryan may himself have been represented by the Cowardly Lion in the *Wizard of Oz*, joining Dorothy's group only after the western farmers (represented by the Scarecrow) and the workingman (represented by the Tin Woodman) already had the silver movement well underway (Rockoff 1990). Just 36 years old at the time of his 1896 defeat, Bryan continued on as a presidential candidate in both the 1900 and 1908 elections.

## References

Anderson, G.L. (1939) 'The proposed resumption of silver payments in 1873', *Pacific Historical Review*, 8: 301–16.

Barnett, P. (1964) 'The crime of 1873 re-examined', *Agricultural History*, 38: 178–81.

Bayoumi, T. and Bordo, M.D. (1998) 'Getting pegged: comparing the 1879 and 1925 gold resumptions', *Oxford Economic Papers*, 50: 122–49.

Bernanke, B.S. (2002) 'Deflation: making sure "It" doesn't happen here', remarks before the National Economists Club, Washington, DC, November 21, available at http://www.federalreserve.gov/boarddocs/speeches/2002/20021121/default.htm

Bordo, M.D. and Filardo, A. (2005) 'Deflation and monetary policy in historical perspective: remembering the past or being condemned to repeat it?' *Economic Policy*, 20: 799–844.

Bordo, M.D. and Redish, A. (2004) 'Is deflation depressing? evidence from the classical gold standard', in R.C.K. Burdekin and P.L. Siklos (eds.) *Deflation: Current and Historical Perspectives,* New York: Cambridge University Press.

Burdekin, R.C.K. (2007) 'Nontraditional monetary policy options and commodity-based stabilization policy', *International Economics and Finance Journal*, 2: 1–18.

Burdekin, R.C.K., Mitchener, K.S., and Weidenmier, M.D. (2012) 'Irving Fisher and price-level targeting in Austria: was silver the answer?' *Journal of Money, Credit, and Banking*, 44(4): 733–50.

Calomiris, C. (1988) 'Price and exchange rate determination during the greenback suspension', *Oxford Economic Papers*, 39: 189–220.

Capie, F. and Wood, G. (2004) 'Price change, financial stability, and the British economy, 1870–1939', in R.C.K. Burdekin and P.L. Siklos (eds.) *Deflation: Current and Historical Perspectives,* New York: Cambridge University Press.

Diebolt, C. and Parent, A. (2008) 'Bimetallism: the "rules of the game"', *Explorations in Economic History*, 45: 288–302.

Dowd, K. (1996) 'The analytics of bimetallism', *Manchester School of Economic and Social Studies*, 64: 281–97.

Drake, L.S. (1985) 'Reconstruction of a bimetallic price level', *Explorations in Economic History*, 22: 194–219.

Fisher, I. (1913a) 'A compensated dollar', *Quarterly Journal of Economics*, 27: 213–35.

Fisher, I. (1913b) *The Purchasing Power of Money: Its Determination and Relation to Credit, Interest and Crises,* New and Revised Edition (assisted by Harry G. Brown), New York: Macmillan.

Flandreau, M. (1996) 'The French crime of 1873: an essay on the emergence of the international gold standard, 1870–1880', *Journal of Economic History*, 56: 862–97.

Fox, D.M. (1897) *The Silver Side, 1900 Campaign Text-Book*, Chicago, IL: W. B. Conkey.

Friedman, M. (1992) *Money Mischief: Episodes in Monetary History*, New York: Harcourt Brace Jovanovich.

Friedman, M. and Schwartz, A.J. (1963) *A Monetary History of the United States, 1867–1960*, Princeton, NJ: Princeton University Press.

Gramm, M. and Gramm, P. (2004) 'The free silver movement in America: a reinterpretation', *Journal of Economic History*, 64: 1108–29.

Krugman, P. (2009) *The Return of Depression Era Economics and the Crisis of 2008,* New York: W.W. Norton.

Laughlin, J.L. (1901) *The History of Bimetallism in the United States*, 4th edn., New York: D. Appleton.

Obstfeld, M. and Taylor, A.M. (2003) 'Sovereign risk, credibility and the gold standard: 1870–1913 versus 1925–31', *Economic Journal*, 113: 241–75.

Oppers, S.E. (1996) 'Was the worldwide shift to gold inevitable? An analysis of the end of bimetallism', *Journal of Monetary Economics*, 37: 143–62.

Redish, A. (2000) *Bimetallism: An Economic and Historical Analysis*, New York: Cambridge University Press.

Rockoff, H. (1990) 'The "Wizard of Oz" as a monetary allegory', *Journal of Political Economy*, 98: 739–60.

Siklos, P.L. (2010) 'Deflation', in R. Whaples (ed.) *EH.Net Encyclopedia*, http://eh.net/encyclopedia/article/siklos.deflation

Timberlake, R.H. (1964) 'Ideological factors in specie resumption and Treasury policy', *Journal of Economic History*: 24: 29–52.

Velde, F.R. (2002) 'The crime of 1873: back to the scene', Working Paper 2002–29, Federal Reserve Bank of Chicago, Chicago, IL.

Walker, F.A. (1893) 'The free coinage of silver', *Journal of Political Economy*, 1: 163–78.