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PETER NEWMAN · MURRAY MILGATE

JOHN EATWELL

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for 79.2 percent of all deposits (compared with 87 percent in 1980) and for 75.2 percent of bank loans (compared with 84.6 percent in 1980). In addition, all eight specialized credit institutions have remained under government control. In the 1980s bank profitability was substantially below the European average measured either as a percentage of total assets or per employee. The profitability of some of the state-controlled banks had been adversely affected by non-performing loans to over-indebted ailing enterprises, agricultural cooperatives and small-scale industry. Since 1989, bank profits have improved considerably as interest rate margins increased in the aftermath of deregulation and the rise in the yields on government securities and as banks started providing more sophisticated financial services and strengthened their capital base. Nevertheless, to perform efficiently in the competitive single European financial market, state-controlled banks will have to strengthen their capital base further and improve management methods; they should also be allowed to function free of political interference.

The Greek capital markets developed significantly (emerged from their dormant state) only very recently, mainly in response to two factors: the steadily growing reliance of the government on the capital markets for financing its sizeable deficits and an increasing preference of private firms for equity over debt financing. The high bank lending rates of recent years, resulting from the deregulation of the banking system and a restrictive monetary policy, and from the 1990 stock market boom which was partly due to foreign investments following the liberalization of long-term capital movements by non-residents, brought new firms to the Athens stock exchange. In 1990, private firms raised 87 billion drachmas of equity capital, nine times the average amount raised over the previous five years. As a result of these developments, the share of monetary assets (currency plus all bank deposits and bank-issued bonds) in total financial assets held by the nonbank private sector (including public sector securities, private firms equity and shares in mutual funds and investment companies) fell to about 77 percent at the end of 1990 from about 98 percent at the end of 1985. The imposition of a ten percent withholding tax on interest income from bank deposits but not from government securities in 1991 increased disintermediation significantly and allowed the government to finance an estimated 78 percent of its borrowing requirement on the capital markets compared with 43 percent in 1990 and only one percent in 1985.

The Bank of Greece is the country's central bank responsible for the conduct of monetary policy, the enforcement of credit regulations and the implementation of foreign exchange policy. The Bank has the exclusive right to issue banknotes in Greece, holds and manages the country's gold and foreign exchange reserves and acts as the government's banker. Legislation passed in 1982 has placed limits on the amount of short-term credit the Bank can extend to the government and since then the share of central bank financing of the borrowing requirement has declined. The deregulation of the Greek financial system and the gradual removal of foreign exchange controls have led the Bank of Greece to rely increasingly on market-oriented indirect means of monetary control. The supervisory functions of the Bank are also changing, shifting from the task of ensuring banks' compliance with credit and exchange controls and regulations to the monitoring and evaluation of bank asset quality, solvency and capital adequacy.

LUCAS D. PAPADEMOS

See also DEREGULATION OF EUROPEAN FINANCIAL MARKETS; FINANCIAL REPRESSION.

BIBLIOGRAPHY

Bank of Greece. 1986–1990. *Annual Reports.*

Chalikias, D. 1987. Financial reform and problems of monetary policy. Papers and Lectures Series no. 59. Athens: Bank of Greece.

Chalikias, D. 1990. The deregulation of the Greek credit system. Papers and Lectures Series no. 68. Athens: Bank of Greece.

Karatzas et al. 1987. Report of the Committee on the Reform and Modernization of the Banking System. Athens: Greek Banks Association.

Papademos, L. 1991. Monetary policy and financial markets in the 1990s. In *The Greek Economy: Economic Policy for the 1990s*, ed. T.S. Skouras, London: Macmillan.

greenbacks. The 'legal tender acts', beginning in April 1862, authorized for the first time a federal-government currency in the United States that was designated a legal tender for all debts, public and private. The currency was known variously as legal-tender notes, treasury notes, US notes and 'greenbacks'. According to Friedberg (1981), the term 'greenbacks' was first applied to the 'demand notes' of 1861, which were not a legal-tender currency and which were withdrawn from circulation by 1863, having been replaced by the legal-tender notes. Since that time the term greenbacks has been used to refer to the legal-tender notes.

The laws authorizing the creation of legal-tender notes were novel in three important respects. First, prior to this date no treasury securities had been given private legal-tender status, although treasury notes were sometimes receivable in payment of government dues. Furthermore, unlike previous federal currency issues (the treasury notes of 1814, and the 'demand notes' of 1861), the legal-tender notes were neither convertible into gold upon demand, nor useful for extinguishing gold-denominated liabilities like tariffs. Finally, in contrast to earlier treasury issues, vast amounts of greenbacks were issued, and the treasury had authority to reissue any greenbacks it received without limit in amount or time. This made greenbacks an important permanent component of the money supply. The 1862 legislation thus marked three important precedents of lasting importance for US monetary history: government encroachment in determining the *numéraire* used to settle private debts; a departure from specie-based government note issues; and a permanent governmental role in providing a medium of exchange.

These three dramatic shifts in the role of the federal government in providing money and regulating the *numeraire* for private contracts denominated in dollars inspired constitutional controversy and bitter congressional debate. There was no clear constitutional basis for the new powers granted the federal government. To this day, scholars disagree as to whether a reasonable basis for federal powers to issue

currency and declare it a legal tender can be found in the Constitution. Hurst (1973) points out that the framers left the Constitution deliberately vague on these matters as a compromise among three groups: those who thought no such powers should exist, those who thought at least the power of issue should exist, and those who saw currency issue as a potentially important occasional tool of wartime finance. According to Hurst, the constitutional debates among these three groups permit a great degree of interpretive latitude as to the monetary intentions of the founders. Precise meanings were left for posterity to decide, and posterity waited until the years during and immediately after the Civil War.

There was no important political constituency (in the 1860s) supporting inconvertible government currency prior to the War. The main political constituency in favour of government involvement in currency were hard-money Jacksonians who envisioned a uniform government-regulated substitute for state bank notes, essentially along the lines of an older plan formulated by Duncombe (1841). This vision would be realized in the subsequent national banking acts (1863 and after), which established uniform, government backed and licensed, convertible national bank notes (convertible into, and backed by, greenbacks), and which taxed state bank notes out of existence. Thus while it is true that some influential policymakers with Jacksonian views, including the Democrat-turned-Republican Secretary of the Treasury, Salmon P. Chase, saw the Civil War as an opportunity to realize their long-term monetary policy objectives, the legal tender acts were not so conceived. Greenbacks did not supplant state bank currency, and they did not fulfil the hard-money dream of the Jacksonians.

The perceived need for an inconvertible paper currency in early 1862 can only be understood within the context of the policies and events of 1861. The first government currency issue of the War was the demand notes of 1861. These were convertible into gold upon demand, and useful for extinguishing government tariff liabilities at par with gold. Like the treasury notes issued during the War of 1812, these notes retained their value by virtue of their tax backing even when, at the end of 1861, they were made inconvertible into gold upon demand. The government suspension of convertibility followed the suspension of the banking system in the face of adverse news about government finances in December 1861 (the surprisingly bleak annual report of the Secretary of the Treasury, and the threat of war with Britain over the Trent Affair). Banks held large amounts of government securities at the time, and were unusually at risk of a deterioration in government credit. Banks had also transferred large amounts of specie to the government immediately prior to the bad news, and were thus in a relatively illiquid position as well. The government, like the banks, would have experienced an immediate, large outflow of specie if it had not also suspended convertibility. Thus the first proposal to issue inconvertible paper currency came at a time of weakened government financial condition, and suspension of convertibility on all existing notes, public and private. If any new government currency issues were to remain outstanding, they would have to be inconvertible. Otherwise, even with the limited 'tariff convertibility' which the demand notes enjoyed, they would be paid in rapidly, and would deprive the government further of scarce specie.

But many in Congress challenged the need for any new currency issues. The obvious alternatives were increased taxes and increased bond sales. The Secretary of the Treasury and other members of Congress rejected these options, arguing that even new internal taxes (which were imposed in July 1862, but did not yield substantial revenue until 1864) would not raise revenue as quickly, and that new bonds sold would have to be discounted at too great a rate. Revenue from tariffs was constrained by the protectionist duties imposed under the 1861 tariff. One can interpret the reluctance to issue bonds at this juncture as part of an optimal discriminatory policy which insulated bondholders from default risk during periods of fiscal uncertainty to preserve a valuable reputation in the relatively 'elastic-demand' international bond markets (see Calomiris forthcoming). Such discrimination underlay much of government financial policy from the Revolution through the Civil War and its aftermath.

The urgency that underlay the call for greenbacks is illustrated by the rather haphazard way in which the proposal was drafted. Congressman Elbridge G. Spaulding, chairman of the House Committee on Ways and Means, had been working towards passage of a national banking bill akin to the subsequent national banking act. The fiscal crisis of December 1861 led him temporarily to abandon that bill in favour of a hastily drafted bill authorizing the issue of legal tender notes. He argued that 'the treasury-note bill ... is a measure of *necessity* and not one of *choice*. ... We will be out of means to pay the daily expenses in *about thirty days*, and the committee do not see any other way to get along ... except to issue temporarily Treasury notes' (E.G. Spaulding to I. Sherman, 8 January 1862, cited in Mitchell 1903: 47). The bill's advocates, including Spaulding and Chase, repeatedly emphasized, and perhaps exaggerated, the practical need for the bill and promised its speedy repeal once the crisis had passed.

Thus the perceived necessity and promised reversal of the measure, and the limited amount of the initial issue (a net increase in outstanding currency of only $90 million, since much of the new currency was designated to replace existing demand notes), accounted for its successful passage, rather than constitutional interpretations arguing its legitimacy. The April law also contained a conversion option allowing holders of greenbacks to exchange for six percent bonds, which mollified some fears of inflationary intentions. As the war wore on and fiscal pressures mounted, however, initial reassurances faded away. Further issues of $150 million were authorized in July 1862 and again in March 1863, bringing the total authorized greenback supply up to $450 million, and the bond conversion option was repealed in the 1863 act.

More difficult to explain was the legal-tender authority attached to the new currency. Many in Congress saw no practical advantage to the granting of legal tender, and questioned the constitutionality of interfering with private contracts by altering the dollar *numéraire*. Advocates of the bill argued that the provision would force reluctant banks and merchants to accept the currency, and thereby secure its place as part of the circulating medium. Opponents of legal

tender argued that greenbacks' value as an asset, which depended on government policy, would determine their use and value in exchange, and that a government legal-tender law was of no additional benefit (a view which Chase himself later would espouse as Chief Justice of the Supreme Court). Proponents of this view pointed to the successful circulation of treasury notes during the War of 1812 and the demand notes of 1861, neither of which enjoyed private legal-tender status, but both of which were backed by government tax receivability. Advocates of the need for legal tender won the day, not because of a consensus in favour of the substance of their argument, but because of deference to the desires of policymakers (especially Chairman Spaulding and Secretary Chase), and the purported temporary duration of the measure.

Scholars have interpreted Chase's and Spaulding's advocacy of legal-tender authority in a variety of ways. Timberlake (1990) sees the supplanting of state bank notes as Spaulding's and Chase's underlying Jacksonian motivation. According to this view, they incorrectly believed that legal tender was necessary to get acceptance of the currency by banks, and thus drive other bank notes from circulation. If this was the case, Spaulding and Chase clearly miscalculated, since state bank currency continued in circulation alongside greenbacks until the national banking legislation's prohibitive ten percent annual tax forced the replacement of state bank notes by national bank notes. Hammond (1970) provides a quite different explanation of the motives behind legal tender, which does not depend on the ignorance of its advocates. He argues that legal tender was a disguised means for bailing out troubled banks, which had been hurt by the decline in the value of government securities. By linking the *numéraire* of bank loans and deposits to the value of government currency, banks were insulated from the declining value of government credit. Furthermore, banks benefited because private bank borrowers were less likely to default on loans given the reduction in the real value of nominal debts. Mitchell (1903: 389–90) provides supporting evidence for this view by showing that greenback depreciation substantially reduced loan defaults. Whatever the initial constituency or logic behind legal-tender authority, its subsequent constituency (in the greenback movement, and later the free-silver movement) came to include large debtors, particularly farmers, who saw in legal-tender legislation a means of debt forgiveness.

Thus the initial success of the legal tender act followed from the increased latitude granted to financial planners during the Civil War, the perception by these planners that the new powers and note issues were necessary features of optimal wartime financial policy, and the temporary relaxation of adherence to constitutional principles (even the writ of *habeus corpus* was not immune to wartime pressures). But the permanence of the federal encroachment into the supply of currency and the regulation of the *numéraire* depended on congressional inaction (failing to repeal the laws quickly, and return to a specie standard) and Supreme Court approval once the laws were tested.

Congressional inaction was caused in part by a growing new constituency of debtor inflationists who saw the greenback standard as a means of reducing their debt burden. The original commitment to retire greenbacks promptly after the War gradually faded under inflationist pressure. After resolving in June 1864 to prevent growth in the stock of greenbacks, and in December 1865, to promptly resume specie convertibility of greenbacks, congressional policy stalled. In April 1866 Congress restricted retirements of greenbacks, and in February 1868 it halted retirements altogether, freezing the outstanding stock at $356 million. Not until January 1875 did Congress manage to pass an act to resume convertibility beginning in 1879. This act, although ultimately successful, was threatened briefly during the election of 1876.

In the meantime, the courts were hearing challenges to the constitutionality of the legal tender acts. Rulings were guided in large part by practical considerations and by changing political appointments, rather than by objective interpretation of constitutional doctrine. As Siegan (1987) and Unger (1964) discuss in their analyses of judicial decision-making and politics in the post-Civil War era, Democratic judges typically found in opposition to legal tender, while Republicans found in favour. (By the 1890s the positions of the two parties had effectively reversed, with the 'soft-money' Democrats opposing the 'hard-money' Republicans in the battle over unlimited coinage of silver.)

The first case to reach the Supreme Court was Hepburn v. Griswold (1869). Ironically, Salmon Chase, now Chief Justice of the Court, sided with the narrow majority in ruling that debts contracted in dollars before the legal tender act was passed could not be settled in depreciated greenback dollars. While the scope of the case was limited to debts contracted before the passage of the law, the Justices' opinions encouraged a broader interpretation by finding no constitutional basis or practical wartime need for the legal-tender power. President Grant was displeased with this finding and succeeded in appointing two clear advocates of legal-tender power to the high court. In 1871 the Supreme Court reversed the earlier decision in Parker v. Davis and Knox v. Lee, ruling that even contracts denominated in dollars prior to the legal tender acts were subject to the law. In large part the majority opinion of Justice Strong focused on the financial disorder that would come from changing all contracts made under the greenback standard to a specie basis, but as Timberlake and others have noted, this does not explain the reversal of the protection of contracts written before April 1862. In Juilliard v. Greenman (1884) the Court reaffirmed the constitutionality of legal-tender laws in peacetime and wartime alike.

Thus the permanence of greenbacks and the government's legal tender power were neither intended nor desired by Congress or the Secretary of the Treasury during the War. Instead they are best viewed as short-term policies that became permanent as a result of political stalemate and judicial pragmatism. Overturning federal powers supported by the government in peacetime proved to be as difficult as denying expanded powers during wartime.

The value of greenbacks relative to gold, or other commodities, varied greatly from 1862 until the resumption of convertibility in January 1879. At their nadir, in July 1864, greenbacks were valued in the New York gold market at less than 37 percent of their par value. Even before greenbacks were issued, during the congressional debate over the first legal tender act, there was speculation over how much

inflation greenback issues would cause, along with disagreement over whether the quantity of greenbacks, or the public's expectations regarding government fiscal policy and resumption would be the primary determinants of the value of greenbacks.

The quantity-versus-expectations debate of greenback valuation continued among scholars who analysed the actual variation in the greenback–gold exchange rate. Mitchell (1903, 1908) opposed the quantity-theory approach, arguing that news about battle victories (linked to expectations of fiscal policy and resumption of convertibility) was closely associated with exchange rate changes, and that the overall money supply was endogenous to the price level rather than vice versa. More recent studies by Roll (1972) and Thompson (1972) support Mitchell's argument that fiscal policy, and war news in particular, called the tune in monthly or weekly exchange rate changes. Friedman and Schwartz (1963) opposed Mitchell's view, arguing that the supply of high-powered money (which they identified with greenbacks) was the long-run determinant of prices and exchange rates. They argued that short-run fluctuations in the exchange rate were essentially irrelevant, on the presumption that the exchange market was inefficient.

Recently, Calomiris (1988; 1991) has argued that Mitchell's view – that the exchange and commodities markets processed information about long-run expectations, and that the money supply was endogenous – is correct, and that Friedman and Schwartz's monetarist explanation of exchange rate and price changes is theoretically incomplete and inconsistent with a variety of evidence. Calomiris modelled money-supply and money-demand processes during the period. Like Friedman and Schwartz he assumed a stable standard money-demand function (which the data support). Unlike them he modelled the money-supply process by explicitly taking account of the factors governing the supply of each component. Calomiris showed that the supply of greenbacks was not the marginal component of paper currency supply; rather, national bank notes, which were perfect substitutes for greenbacks, and whose supply was endogenous to the price level (given the licensing arrangements of the federal government), were the marginal component of the paper money supply. Thus the supply of greenbacks could not have determined the price level. Instead, expectations about future resumption possibilities and timing, along with an equilibrium rate of expected deflation (consistent with zero seigniorage profit in the supply of national bank notes) determined the time paths of prices and money simultaneously, in a manner quite similar to that described by Mitchell.

Calomiris reported a variety of evidence consistent with the Mitchell view, and contrary to the Friedman–Schwartz approach. First, evidence in favour of efficiency in the gold market (implying a link between short- and long-run exchange rate movements), along with evidence of deflationary expectations (from differences in bond market yields denominated in gold and greenbacks, and from Phillips curve estimates), support the view that exchange rate change reflected a combination of unanticipated short-run shocks to expectations of resumption and gradual expected appreciation. Second, the stability of the gold value of demand notes (backed by par valuation relative to gold in payment of future tariffs) relative to the gold value of greenbacks during the period when both circulated confirms the role of expectations in determining current exchange rates. Third, in addition to the earlier evidence on the importance of battle news for exchange rates during the Civil War, there is direct evidence of the importance of fiscal policy news (changes in the composition of government debt) in determining exchange rates.

Resumption was a political achievement in which sound fiscal policy after the War, and a commitment to resuming convertibility, allowed a smooth transition from an inconvertible to a convertible currency. Contrary to Friedman and Schwartz's reasoning, freezing the supply of greenbacks, by itself, could not have achieved that result. Once the government had returned to the specie standard, greenbacks became a hard currency, the supply of which was endogenous to public demand. They continued to circulate alongside other media of exchange (including full-valued and token coins, silver certificates and federal reserve notes) as distinct convertible liabilities of the federal government. The last notes were issued in 1923.

CHARLES W. CALOMIRIS

See also BANK CHARTERS; CENTRAL BANKING INSTITUTIONS IN THE UNITED KINGDOM AND THE UNITED STATES; CLEARING HOUSE ASSOCIATIONS; FIRST AND SECOND BANKS OF THE UNITED STATES; LEGAL TENDER.

BIBLIOGRAPHY

Calomiris, C.W. 1988. Price and exchange rate determination under the greenback suspension. *Oxford Economic Papers* 40, December: 719–50.

Calomiris, C.W. 1991. Policy regimes, the price process, and the Phillips Curve: the United States, 1862–1913. Working paper, The Wharton School, July.

Calomiris, C.W. The motives of U.S. debt-management policy, 1790–1880: efficient discrimination and time consistency. *Research in Economic History*, forthcoming.

Dewey, D.R. 1903. *Financial History of the United States*. New York: Longman Green and Co.

Dunbar, C. 1891. *Laws of the United States Relating to Currency, Finance, and Banking from 1789 to 1896*. Boston: Ginn and Co.; reprinted, New York: Augustus Kelly, 1969.

Duncombe, C. 1841. *Duncombe's Free Banking*. Cleveland: Sanford and Co.

Dunne, G.T. 1960. *Monetary Decisions of the Supreme Court*. New Brunswick, New Jersey: Rutgers University Press.

Friedberg, R. 1981. *Paper Money of the United States*. 10th edn, Fort Lee, New Jersey: The Coin and Currency Institute.

Friedman, M. and Schwartz, A.J. 1963. *A Monetary History of the United States, 1867–1960*. Princeton: Princeton University Press for the National Bureau of Economic Research.

Hammond, B. 1970. *Sovereignty and an Empty Purse: Banks and Politics in the Civil War*. Princeton: Princeton University Press.

Hurst, J.W. 1973. *A Legal History of Money in the United States, 1774–1970*. Lincoln, Nebraska: University of Nebraska Press.

Mitchell, W.C. 1903. *A History of Greenbacks*. Chicago: University of Chicago Press.

Mitchell, W.C. 1908. *Gold, Prices, and Wages Under the Greenback Standard*. Berkeley: University of California Press.

Roll, R. 1972. Interest rates and price expectations during the Civil War. *Journal of Economic History* 32(2), June: 476–98.

Siegan, B.H. 1987. *The Supreme Court's Constitution*. New Brunswick, New Jersey: Transaction Books.

Studenski, P. and Krooss, H. 1963. *Financial History of the United States*. New York: McGraw Hill.
Thompson, G.R. 1972. Expectations and the greenback rate, 1862–1878. PhD. Dissertation, University of Virginia.
Timberlake, R.H. 1990. The political origin and judicial sanction of legal tender paper money in the United States. Unpublished manuscript.
Unger, I. 1964. *The Greenback Era*. Princeton: Princeton University Press.

green currencies. Green currencies are not currencies in the accepted sense. They cannot be used as media of exchange; rather they are part of a set of administered prices associated with the Common Agricultural Policy (CAP) of the European Communities (EC). Their existence stems from a major objective of the CAP – to stabilize markets – and from the commitment to market unity or free trade at common prices through the Community.

The support mechanisms used under the CAP are notoriously complex in practice, but simple in concept. Essentially, the domestic EC markets for most farm products are supported through a combination of border taxes and subsidies and domestic (EC) market intervention. Imports are taxed through variable levies, as the difference between an administered minimum import price (*threshold price*) and the current world offer price, while exports are made possible through export refunds (variable export subsidies) as the difference between an administered internal floor price (*intervention price*) and current world prices. Domestic markets are additionally supported through intervention buying of excess supplies into EC stores at the intervention price. The system of intervention and threshold prices is linked to a set of *target prices*, which are determined annually by the Council of Agricultural Ministers.

Since administered support prices (threshold, intervention and target prices) for the CAP are set in European currency units (ecu), fluctuations in market exchange rates lead to fluctuations in these administered prices in national currency terms. These fluctuations contradict the policy objective of stabilizing agricultural markets, and hence have led to the use of *green currencies*. Green rates of exchange are the administered conversion rates between the ecu and national currencies so as to stabilize administered prices in national currency terms. However, since this system results in differences in national administered prices at market exchange rates (at which all trade occurs), it is also necessary to use a set of internal EC border taxes and subsidies to prevent internal trade undermining national administered prices. These internal EC border taxes and subsidies are known as *Monetary Compensatory Amounts* (MCAs).

MCAs were introduced in 1969, just two years after the introduction of common (administered) prices under the CAP, to prevent a franc devaluation and Mark revaluation affecting the agreed support prices in France and Germany. The price of supported agricultural commodities exported from France to Germany was effectively increased by the application of a tax (negative MCA) levied on the French exporter, while the price of German exports to France was reduced due to the payment of a subsidy (positive MCA) to the German exporter. These first MCAs were intended to be temporary, with the green rates for the DM and franc being gradually adjusted towards the new market rates, allowing time for the agricultural markets and sectors to adjust to the new market reality. However, the collapse of fixed exchange rate regimes in the early 1970s led to the extension of the MCAs throughout the European Community. While there continued to be an understanding of their temporary nature, with an expectation that green rates should be adjusted towards market rates, continual exchange rate fluctuations led to an effectively permanent system of MCAs during the 1970s and 1980s. Complications emerged as a consequence of accession of the UK, Denmark and Ireland to the EC and the CAP in 1973, and the subsequent expansion of the EC to include Greece, Spain and Portugal. As part of the accession agreements for these countries, *Accessionary Compensatory Amounts* were also introduced as a similar mechanism to MCAs, allowing the introduction of common trade within the expanded community prior to full alignment of domestic market prices.

Further complications arose from the development of the European 'Snake' in 1972, managing European currencies within narrow bands, the 'joint float' of European currencies in 1973, effectively fixing exchange rates between the members of the joint float, and the formation of the European Monetary System in 1979. Not only did these changes affect the relationship between national currencies and the European currency unit, they also affected the definition of the European currency unit, and thus the definition of CAP common (administered) prices. As a result, they have also affected the definition and variability of green rates of exchange and associated MCAs.

Currently (January 1992), agricultural support prices are set in terms of a 'green' ecu, which is some 14.5 percent overvalued compared with the market rate. Thus a correction factor is also included in the calculation of MCAs from green and market rates of exchange. This anomaly arose as a consequence of a previous policy decision to 'eliminate' fixed positive MCAs (associated with undervalued green rates). This decision would have resulted in a reduction of support prices in national currency terms, so the Council of Agricultural Ministers could not agree without provision for maintaining national support prices, through definition of an overvalued 'green' ecu.

The European Commission has repeatedly tried to eliminate the MCA and green rate system, since it is clearly at odds with the free trade and common price principles of the CAP. Many proposals have been made to the Council of Ministers over the history of the system, usually involving automatic adjustment of green rates to market levels. While some progress has been made in this direction, with 'new' divergences being eliminated over set time periods, the Council of Ministers has always been unwilling to relinquish the degree of national sovereignty over domestic prices provided by the system, or to subject the agricultural industry to additional instability associated with exchange rate movements.

More importantly, the system allows for different national perceptions of the appropriate level of support prices, at least within the convention that green rates can only reflect previous market rates and can only be adjusted towards current market rates of exchange. Historically, the system has allowed the UK to hold national support prices down