1. Monetary regimes: then and now

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INTRODUCTION

It was some fifty years ago, when Harry Johnson came to the LSE and established his monetary seminar there, that Vicky Chick and I first met, and have remained friends and colleagues ever since.

During these fifty years there have been several regime changes in monetary management. The Bretton Woods system of pegged exchange rates gave way in 1971–72 to a rather inchoate non-system of regional pegging (or fixing as in the euro-zone) combined with a – somewhat managed – float between major currencies. So, until the early 1970s, only the Fed in the USA had to concern itself with the principles, regime and rules for managing its domestic monetary system.

But after the breakdown of Bretton Woods and the (associated) stagflation of the 1970s, most of the monetary authorities, both central banks and finance ministries, had to grapple with the question of the appropriate principles (regime) by which to steer the monetary ship in their own countries. The usual initial response, a pragmatic form of monetarism in the guise of monetary targets, proved unsatisfactory under pressure in the early 1980s.

It was then succeeded in the 1990s by the adoption of inflation targetry (IT). This chapter reviews both this regime change and an earlier regime change, embodied in the Bank Charter Act of 1844. Both were focused on exactly the same objective, that is, the achievement of price stability.

It is, however, somewhat ironic that neither of the two monetary regime changes on which this chapter will focus was *initially* viewed as being primarily a matter of monetary policy adjustment. Instead, the most recent, the adoption of an inflation target as the operational rule for a Central Bank, which occurred first in New Zealand in 1984–90, was a by-product of a wider search by the then incoming Labour government in New Zealand (Prime Minister David Lange, Treasury Secretary, Roger Douglas), for proper operational rules of conduct for *all* public sector corporations. The previous National Party government, under Robert Muldoon, had directly

controlled and grievously mismanaged several of these public corporations (Think Big; see Section 4.2.7 on this subject in the Wikipedia article on Muldoon), and the new Lange/Douglas government wanted to establish objective operational guide-posts (metrics) by which the success, or failure, of such corporations could be assessed. The question therefore subsequently arose about the correct operational metric by which the success/failure of the Central Bank could be measured, and, after some considerable soul-searching,¹ the answer that became accepted was that the proper touchstone was the rate of inflation (Fischer 1994; Svensson 2001; Singleton et al. 2006, ch. 5), so that it followed that the objective of the Central Bank should be to control (some measure of) the overall inflation rate.

The second monetary regime change considered here is that introduced by the Bank Charter Act of 1844. This is widely viewed as being the brain-child of David Ricardo and the Currency School (Fetter 1978). But David Ricardo's main purpose, in his earlier (than the more famous paper on a 'Plan for the establishment of a National Bank', 1824) and much longer monetary paper, 'Proposals for an economical and secure currency' (1816), had been to shift the seignorage receipts from the hands of a private, oligopolistic corporation back to the public (taxpayers) at large. The greater bulk of this latter text (and most of the Appendices), Sections V, VI and VII, involves an assessment of the degree to which he finds 'The public services of the Bank excessively overpaid' (the heading of Section VI).

It is only in the final page of this paper that Ricardo puts forward a brief comment on an alternative method of managing the note issue, and even then the focus is on seignorage receipts, *not* as a preferable means of monetary control.

Paper money may be considered as affording a seignorage equal to its whole exchangeable value, – but seignorage in all countries belongs to the state, and with the security of convertibility as proposed in the former part of this work, and the appointment of commissioners responsible to parliament only, the state, by becoming the sole issuer of paper money, in town as well as in the country, might secure a net revenue to the public of no less than two millions sterling. (Ricardo 1816, p. 114)

Nor did Ricardo blame the Bank of England for the suspension of convertibility in 1797, or the subsequent inflation. He did not argue that

¹ It is again ironic, particularly in the context of this chapter, that the main alternative proposal, put forward by Paul Atkinson of the NZ Treasury in November 1986 (Singleton et al. 2006, pp. 143–7), was to break up the Reserve Bank of New Zealand (RBNZ) into two parts, a currency board issuing notes based on a peg with the Australian dollar, plus a separate, publicly owned, commercial bank.

the Bank's powers had been misused, rather that they might be; so that allocating such discretionary powers to anybody, whether private, or even worse in government, was dangerous. Money creation needed rules rather than discretion, even if discretion had not worked that badly in practice.²

A panic of this kind was the cause of the crisis in 1797; and not, as has been supposed, the large advances which the Bank had then made to government. Neither the Bank nor government were at that time to blame; it was the contagion of the unfounded fears of the timid part of the community, which occasioned the run on the Bank, and it would equally have taken place if they had not made any advances to government, and had possessed twice their present capital. If the Bank had continued paying in cash, probably the panic would have subsided before their coin had been exhausted.

With the known opinion of the Bank directors, as to the rule for issuing paper money, they may be said to have exercised their powers without any great indiscretion. It is evident that they have followed their own principle with extreme caution. In the present state of the law, they have the power, without any control whatever, of increasing or reducing the circulation in any degree they may think proper: a power which should neither be intrusted to the state itself, nor to any body in it; as there can be no security for the uniformity in the value of the currency, when its augmentation or diminution depends solely on the will of the issuers. That the Bank have the power of reducing the circulation to the very narrowest limits will not be denied, even by those who agree in opinion with the directors, that they have not the power of adding indefinitely to its quantity. Though I am fully assured, that it is both against the interest and the wish of the Bank to exercise this power to the detriment of the public, yet, when I contemplate the evil consequences which might ensue from a sudden and great reduction of the circulation, as well as from a great addition to it, I cannot but deprecate the facility with which the State has armed the Bank with so formidable a prerogative. (Ricardo 1816, pp. 68–9)

RICARDO AND AN INFLATION TARGET

In 1816 Ricardo was keen to return to the Gold Standard as soon as practicably possible. He was, however, aware of the concern that such a metallic standard would mean that fluctuations in the demand/supply balance of that metal (or metals under bimetallism) could cause fluctuations in the general price level. But he dismissed the alternative of relating monetary management to the general level of prices on the grounds that this latter

² It is, of course, possible that Ricardo might have felt that he would be more successful in attacking the Bank on a narrow front, that is, extracting seignorage receipts due to the public, than on a broader front, of mismanaging policy. But Ricardo was generally quite deferential about the Bank's actual management of money and public sector debt. Nothing *ad hominem*; it was all about principles.

was technically impossible. Thus at the start of Section II (Ricardo 1816, pp. 58–9), he writes:

During the late discussions on the bullion question, it was most justly contended, that a currency, to be perfect, should be absolutely invariable in value.

But it was said, too, that ours had become such a currency, by the Bank restriction bill; for by that bill we had wisely discarded gold and silver as the standard of our money; and, in fact, that a pound note did not and ought not to vary with a given quantity of gold, more than with a given quantity of any other commodity . . .

It has indeed been said that we might judge of its value by its relation, not to one, but to the mass of commodities. If it should be conceded, which it cannot be, that the issuers of paper money would be willing to regulate the amount of their circulation by such a test, they would have no means of so doing; for when we consider that commodities are continually varying in value, as compared with each other; and that when such variation takes place, it is impossible to ascertain which commodity has increased, which diminished in value, it must be allowed that such a test would be of no use whatever.

He also wrote that:

Commodities generally, then, can never become a standard to regulate the quantity and value of money; and although some inconveniences attend the standard which we have adopted, namely, gold and silver, from the variations to which they are subject as commodities, these are trivial, indeed, compared to those which we should have to bear, if we adopted the plan recommended. (Ricardo 1816, Section II, p. 61)

At the time when Ricardo was writing, indexation had not yet become available. Paasche published his proposed index in 1874, and Laspeyres in 1871. (Though against this it might be argued that, in the early 19th century, a few foodstuffs, corn and beer, and clothing, wool, would have dominated any index.) Now that we do have indexation available, can we assume, by logical inference, that Ricardo would have been a supporter of inflation targets? Perhaps, though we cannot, of course, know.

But I wonder whether Ricardo would have been sceptical about whether the right choice of index is being made. From a condition in which there was no such index available, we now have a plethora of alternative indices, RPI, CPI, HICP, PCE, and so on, each of which can be adjusted to exclude the effect of interest rates, or of volatile elements subject to supply shocks, for example food and energy, or of extreme observations, and so on. Yet even this ignores the deeper question of what role should be given to asset prices in the measurement of inflation (see Alchian and Klein 1973 and Goodhart 2001). Given that money is held as a component of an asset portfolio, and that bank loans are predominantly used for asset purchases,

for example of houses, relating monetary growth solely to an index of the prices of *current* goods and services seems on the face of it rather odd. In the years before 2008 when CPI inflation remained steadily low, but asset prices, especially housing, were rising rapidly, was monetary policy basically correctly stable?

What seems (to me) remarkable is the extent to which commentators and the general public not only accept whatever index is set out by the authorities as *the* measure of inflation for monetary policy purposes, but also agonise over minute changes in that index. Of course whatever index is presented does influence policy, but it should be remembered that no single index is perfect. Ricardo was wrong in believing that the attempt to measure the general level of prices was impossible, but he would have surely been correct if he had just claimed that no single index would give such a perfect, correct measure.

RICARDO AND THE BANK CHARTER ACT 1844

Whereas the Bank Charter Act of 1844 is usually, and rightly, ascribed to being based on Currency School principles and representing a triumph for Ricardo's arguments, it was *not* what Ricardo had advocated in his posthumously published 'Plan for the establishment of a National Bank' (1824). Instead, what Ricardo had advocated was a separate Currency Board, automatically transforming specie presented to it into notes, or vice versa, at the appropriate (gold point) prices. The Commissioners running this Board were to be entirely independent, though it was left somewhat unclear as to who was to make the appointment or its duration.

Thus Ricardo (1824, pp. 282–3), wrote:

It is said that Government could not be safely entrusted with the power of issuing paper money; that it would most certainly abuse it; and that, on any occasion it was pressed for money to carry on a war, it would cease to pay coin, on demand, for its notes; and from that moment the currency would become a forced government paper. There would, I confess, be great danger of this, if Government—that is to say, the ministers—were themselves to be entrusted with the power of issuing paper money. But I propose to place this trust in the hands of Commissioners, not removable from their official situation but by a vote of one or both Houses of Parliament. I propose also to prevent all intercourse between these Commissioners and ministers, by forbidding every species of money transaction between them. The Commissioners should never, on any pretence, lend money to Government, nor be in the slightest degree under its control or influence. Over Commissioners so entirely independent of them, the ministers would have much less power than they now possess over the Bank Directors. Experience shows how little this latter body have been able

to withstand the cajolings of ministers . . . If Government wanted money, it should be obliged to raise it in the legitimate way; by taxing the people; by the issue and sale of exchequer bills, by funded loans, or by borrowing from any of the numerous banks which might exist in the country; but in no case should it be allowed to borrow from those who have the power of creating money.

After Ricardo's death in 1823, proposals to concentrate note issue in England were continued by his supporters, for example Colonel Torrens and his brother, Samson Ricardo, in what became known as the Currency School. Following on some macroeconomic disturbances in the 1830s, and dissatisfaction with the Bank of England's policies at the time (plus agreement that seignorage should accrue to the taxpayer, not to bankers), it did seem then possible that Ricardo's idea for an independent Currency Board might get adopted (see Fetter 1978, ch. VI).

Fetter attributes the fact that this did not happen almost entirely to one man, Sir Robert Peel, the Prime Minister at the time. Peel wrote a paper to his Cabinet colleagues offering three alternatives:

1. Leave everything as it was.
2. A Ricardian independent Currency Board.
3. Divide the Bank of England into two parts, with the Issue Department being, in effect, a Currency Board, and a separate Banking Department on top of that.

Not surprisingly his Cabinet colleagues voted, virtually unanimously, for the compromise option (3). It had the virtue of avoiding unsettling institutional disruption, and of being more acceptable to the Bank.³ It also seemed to go sufficiently far to meet the demands of the Currency School.

What is much less clear is whether Peel, or anybody else at the time, realised the crucial difference between having an independent Currency Board and embedding the Issue Department in the Bank. This was that the cash reserves of the whole British banking system would continue to be centralised in the Bank of England under the Bank Charter Act, whereas they would have been (much more likely) dissipated more widely amongst the individual banks, including the Bank of England under an independent Currency Board.

³ According to Fetter (1978, p. 183), Peel had had prior talks with Cotton and Heath, the Governor and Deputy Governor of the Bank of England: 'Out of their discussions came a memorandum from Cotton and Heath that was in effect an outline of the act that finally emerged, plus a provision not in the final act that would have permitted the fiduciary issue to be exceeded on the authorization of three Ministers of the Crown'.

Thus a stylised Bank Return⁴ would have been:

Issue Department	
<i>Assets</i>	<i>Liabilities</i>
Gold	Notes Issued
Fixed Fiduciary Issue	
Banking Department	
Notes Unissued	Bankers' Deposits
Other Assets	Other Liabilities

The key was that the unissued notes in the Banking Department provided the margin of flexibility which allowed the Bank, under normal circumstances, both to maintain the Gold Standard and to manage the regular workings of the financial system (see Sayers 1951). In practice the Bank had a reaction function, much the same as the Taylor reaction function under an inflation target. Thus if the 'Proportion' (of unused bank notes to liabilities) should fall, it would start being restrictive and seek to raise Bank rate, and vice versa. (See the papers by Dutton 1984 and Pippenger 1984, and Goodhart's 1984 comment.)

Thus, just as the Inflation Target has been applied flexibly, so was the Gold Standard in the UK. But despite such flexibility, there were, and remain, abnormal occasions when a panic ensues and there is a rush for cash. After 1844 this led to the need to suspend the Bank Act; in the context of an Inflation Target, it led to unconventional monetary policy; again rather similar.

Would Ricardo have approved this (extra) degree of flexibility that the Bank Charter Act provided, relative to his separate Currency Board? We cannot, of course, tell, but I rather doubt it. Ricardo thought that the system should work symmetrically in response to a rise, or a fall, in the value of money. Thus he wrote (1816, p. 64):

With what justice, then, can it be maintained, that when gold and silver rise, money should be kept by force and by legislative interference at its former value; while no means are, or ever have been, used to prevent the fall of money when gold and silver fall? If the person possessed of money is subject to all the inconveniences of the fall in the value of his property, he ought also to have the benefits of the rise.

⁴ See Sayers (1951, ch. 5).

This seems to me to imply that he was relatively unconcerned about wage/price stickiness, and believed in price flexibility as the main normal adjustment mechanism. Of course, price flexibility cannot work in a crisis, but Ricardo was fatalistic about such crises. They just have to take their course.

Against such panics, Banks have no security, *on any system*; from their very nature they are subject to them, as at no time can there be in a Bank, or in a country, so much specie or bullion as the monied individuals of such country have a right to demand. Should every man withdraw his balance from his banker on the same day, many times the quantity of Bank notes now in circulation would be insufficient to answer such a demand. (Ricardo 1816, p. 68, emphasis in original)

The concept of ‘moral hazard’ had not been invented in the early 19th century, but again my guess is that Ricardo would have embraced it. I see him as temperamentally a forerunner of the Chicago School.

TOO LITTLE FLEXIBILITY

Whereas the Currency School may have criticised the compromise that lay at the heart of the 1844 Bank Charter Act on the grounds that it allowed, in practice, too much flexibility, the Banking School attacked it on the grounds that it provided, in some respects, too little flexibility. Besides making the valid point that bank deposits were part of the effective money supply, as well as notes (so that a rule controlling note issue left the broader money stock untethered), the proponents of the Banking School argued that the (broader) money stock should adjust flexibly to the needs of trade.

Thus, if you take the basic, well-known, quantity equation, $MV = PY$, then P will remain more stable when M responds flexibly to changes in Y (and V), rather than if M is set according to some rule which ignores changes in Y . But in a world which pre-dated National Income statistics, how do you know how Y is changing?

The main answer, according to the Banking School, was to distinguish between lending, at that time primarily financed by bills of exchange, based on actual trade and activity, and speculative lending, where the borrower hoped to profit from rising asset prices. This was the essence of the Real Bills doctrine. The Bank of England’s supervisory function should be to use its powers to discriminate against speculative paper, and its purveyors, in the bill market. The Real Bills doctrine had the advantage of unifying the macro-monetary function of the Central Bank (since re-discounting ‘real bills’ would vary M in line with Y , and so

keep P stable) with the micro-stabilisation function (since discrimination against speculative paper would check asset price bubbles and ‘unsound’ banking).

Perhaps unsurprisingly, versions of the Real Bills doctrine⁵ came to dominate central banking theory in the years between 1850 and 1914. The Federal Reserve System set up in 1913, after extensive study of best Central Bank practices elsewhere by the National Monetary Commission, was predicated on such a model, to provide an elastic currency in support of the needs of trade. Ricardo and the Currency School may have had the better of the argument in the run-up to the 1844 Bank Act, but they comprehensively lost the subsequent battle of ideas.

Unfortunately the Real Bills doctrine was flawed, because a policy of adjusting the money stock in line with fluctuations in activity is pro-cyclical. Prior to 1914 such procyclicality was kept within limits by adherence to the Gold Standard, and Banking School proponents were as strongly in support of maintaining the Gold Standard as the Currency School (see Fetter 1978, ch. VI, p. 192). But when the Gold Standard ran into difficulties, the lack of real bills to discount in the USA during the Great Depression and the associated belief that buying Government debt was, ipso facto, inflationary, was one of the factors preventing the Fed from undertaking sufficiently counter-cyclical monetary expansion.

Have we got an analogous problem nowadays, under the current Inflation Target regime? Perhaps, though the analogy is a bit stretched. Anyhow, prior to 2007–08, the general view was that the achievement of price stability (the macro-monetary function) would bring with it financial stability (the micro-prudential function), so long as the commercial banks abided by some, rather gentle, required (Basel) capital ratio requirements. So the financial stability functions of Central Banks were, at least in some countries, notably the UK, somewhat run down. This ignored the fact that price stability did *not* guarantee financial stability; that financial cycles had a different pattern from business cycles; and that banks had become overwhelmingly focused on the finance of real estate, subject to asset price boom and bust, rather than on the finance of business and trade.

Just as in the 1930s when the unification of macro-monetary and micro-stability policies under the real bills doctrine fell apart, so now the unification of the two arms of policy under the flexible inflation target, plus Basel, has also broken down. The answer in the 1930s was tight structural control of financial intermediation, plus Keynesian demand management (and WWII). That broke down in the 1970s, with the

⁵ See Green (1987).

resulting inflation leading to a combination of the flexible inflation target and a liberal, globalised financial system.

Whither now? The Great Financial Crisis (GFC) of 2007–09 sent the monetary authorities scurrying to impose much stricter capital requirements on banks. But the depression, and risk aversion, were reducing bank equity values and bank profitability. So the banks, especially in Europe, sought to meet these additional ratio requirements by deleveraging, particularly cutting back on cross-border lending, rather than by retaining profits or raising new equity in capital markets. Such deleveraging helped to make the recovery from the GFC sluggish; to counter that, Central Banks lowered interest rates to the Zero Lower Bound and flattened the yield curve, but this, unfortunately, served to reduce commercial bank profitability yet further. And the world has entered a debt trap, whereby the massive debt overhang precludes any confident re-normalisation of interest rates, but the continuation of such abnormally low rates encourages yet more debt issue.

Monetary policy has got itself into a bind. In this context it is not surprising that there have been increasing criticisms of the recent direction of macroeconomic policy and the allocation of responsibility for monetary policies to an independent Central Bank.

How will it all play out, and will there be further monetary regime changes? Watch this space.

What would Ricardo have advocated?

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