Free Banking and the Bank of Canada

by

David Laidler

Working Paper # 2005-4

June 2005



RBC Financial Group Economic Policy Research Institute EPRI Working Paper Series

Department of Economics
Department of Political Science
Social Science Centre
The University of Western Ontario
London, Ontario, N6A 5C2
Canada

This working paper is available as a downloadable pdf file on our website http://www.ssc.uwo.ca/economics/centres/epri/

Free Banking and the Bank of Canada*

by

David Laidler

Abstract: It is argued that today's Canadian monetary system has certain important characteristics in common with a free banking regime such as might have evolved had matters been left to market forces, and that the Bank of Canada's recent success probably has more than a little to do with this fact. It is also argued, however, that, in Canada at the current juncture, further progress towards "free banking" as this alternative is nowadays known, would likely involve unilateral adoption of the US dollar as the basis for the monetary system. Hence, on the 70th anniversary of the Bank of Canada's founding, the author's wish that it may enjoy many happy returns of its birthday is a particularly sincere one.

Keywords: Bank of Canada, central banking, free banking, price stability,

JEL Classification: B22, E24, E59

*Contribution to a panel discussion in honour of the 70th anniversary of the founding of the Bank of Canada, held at the 2005 annual meeting of the CEA at McMaster University, May 2005. The author is Fellow in Residence at the C. D. Howe Institute and Professor Emeritus at the University of Western Ontario.

The Bank of Canada's Foundation

It is easy to take the Bank of Canada for granted. As it tells visitors to its excellent web-site, it is Canada's Central Bank, something that, to judge from today's appearances, no self-respecting country would ever want to be without. And yet there are a few oddities here.

To begin with, today we are celebrating the Bank's 70th birthday, and yet Canada is nearly twice that age. Evidently, the country was able to get along without a central bank for quite some time, and it is notable that the representatives of the local banking industry on the Macmillan Committee that played midwife at the Bank's birth would have preferred that event not to have occurred. Furthermore, it is not very long since such distinguished commentators as Herbert Grubel (1999) and Tom Courchene and Richard Harris (1999) were suggesting that life without the Bank of Canada might once again be worth experimenting with, and it seems unlikely that we have as yet seen the end of the debate they stirred up.

In 1935, the infant Bank inherited many of its traits from a certain old lady, resident in Threadneedle Street. Walter Bagehot (1873) had long before then declared that lady's central position in the British monetary system to be peculiar to her political and economic circumstances, and had contrasted British arrangements unfavourably with the more natural ones that he believed to prevail in the United States, another country that was seemingly able to do without a central bank for a long time (but nevertheless got one in 1913). Monetary history in the 20th century under central banking, moreover, was not pretty. The Bank of Canada can hardly be blamed for the severity of the Great Depression, but other central banks, not least the Fed., can and have been, with considerable plausibility; and the Bank must surely take some responsibility for the local version of the great inflation that began in the late 1960s and finally came to an end around 1990. The high esteem in which the Bank of Canada is now widely, though not universally, held is recent, being mainly a product of the years since 1990.

In short, the Bank of Canada came late on the scene, was not wanted to begin with in certain well-informed quarters, did not begin to live up to anyone's expectations until very recently, and still has its share of critics. Perhaps, then, Bagehot was right. Perhaps it is possible to live comfortably without a central bank, and perhaps there is something about the Bank of England model that has made it hard to transplant. Perhaps monetary systems would have worked better had they been allowed to develop along the lines he considered natural, Canada's included.

Free Banking

The banking system that Bagehot thought "natural" was made up of many competitive commercial banks of more or less equal size, each one holding its own reserves of gold, and issuing its own notes and deposits, and his ideas here were not unique. As Lawrence White (1984) stressed, they are to be found in earlier 19th century British debates about the configuration of the monetary system, nor did they quite die out after Bagehot wrote (see eg, Vera Smith 1936). However, they represented a minority view. Mainstream monetary economics then and later had it that unregulated competitive banking would be inflation prone, and that the ministrations of some central agency were required to impose a limit on the creation of money that market mechanisms could not spontaneously generate. Only with such an institution in place could desirable price-level behaviour be guaranteed, though quite what form it might take and how much discretionary powers it might be given were more controversial matters.

So matters stood among most monetary economists until the 1970s, when it became once more apparent, and painfully so, that central banks could develop inflationist tendencies of their own, though widely held ideas about a "new inflation", driven by deep sociological causes, stood in the way of the recognition of this fact for a while. Persuasive also were arguments derived from then new analysis of "public choice", that governments and their agents might themselves have an interest in generating inflation, and by the 1970s it was clearly time for another look at the theory of free banking, and at the considerable amount of empirical evidence that had been generated in the many economies that had not been blessed with a central bank since the 18th century but had continued to function nevertheless. Here it will suffice to mention a few early landmarks in the literature that ensued - Benjamin Klein (1974), Earl Thomson (1974) Friedrich von Hayek (1976), - and to note that these and subsequent contributions would ultimately have enough of an impact on mainstream thought to transform what had originally been regarded as

¹In the 19th century the phrase "free banking" indicated a system in which banks could be created without having to seek a charter to operate, provided they complied with certain general legislation. Nowadays, it refers to a competitive system that operates without a central bank. George Selgin and Lawrence White (1994) provide an excellent survey of modern literature on the topic.

²For an influential 20th century statement of this view, see Milton Friedman (1960, especially pp. 4-9) Friedman wanted monetary policy to be constrained by a quasi-constitutional rule mainly to prevent the central bank, whose existence he deemed necessary, from abusing its powers.

cranky notions that could be safely ignored into a critique of conventional wisdom that had to be taken very seriously indeed.

Conventional wisdom had held that free banking would be inflation prone because individual banks would have both incentives and opportunities to debase their liabilities at the expense of an ill-informed public. Not so, said the free bankers: rather it was central banks, acting as agents of government, which had those incentives and opportunities. Private banks on the other hand would find it profitable to create and maintain reputations for probity for the simple reason that such reputations had a positive market value. Competition, moreover, would force such banks to pay interest on their monetary liabilities at the market real rate of return minus the real marginal cost of maintaining them in circulation, plus a premium to offset any expected rate of depreciation in their purchasing power. If the public preferred that the money they held did not depreciate, which seemed plausible if only because of the extra computational costs that would be thus avoided, then competition would also ensure that the expected rate of depreciation in question would converge on zero. Competitive banks could, and therefore would, signal their good intentions in this regard by guaranteeing commodity convertibility in some form, and the system as a whole would be likely to settle on a common commodity (or bundle thereof) for this purpose which would also function as the medium in terms of which inter-bank clearing imbalances were settled.³

Now of course the free bankers knew very well that, in the days before central banks, or, in the case of Britain, before the Bank of England had become conscious of its role as such, many banking systems had been prone to instability, but this characteristic, they argued, was not inherent in competitive banking. Rather it was typically the product of measures that restricted - and in some cases altogether eliminated - the ability of private banks to issue their own currency. Strong seasonal swings in the public's demand for currency, associated in particular with the harvest in what were still predominantly agricultural economies, artificially created fragility that would not have existed had each bank been free to vary the ratio of currency to deposits among

³The free banking literature contains many ingenious schemes for convertibility anchors that go far beyond simply metallic standards, such as those based on gold and silver. As Angela Redish has reminded me, some work goes so far as to speculate about the potential stability of systems with no such anchor at all. Selgin and White (1994) survey this material, which there is no space to discuss here, with admirable clarity. Suffice it to say that I share their scepticism about the viability of systems that lack any convertibility anchor, and that to it I add a further personal judgement: namely, that, to be politically durable, monetary arrangements need to be kept simple, and that some of the more complex schemes that have appeared in the free banking tradition, though apparently theoretically viable, would probably fail this test in practice.

is own liabilities. Where such freedom existed, suspicions about the solvency of any particular institution would have been unlikely to generate contagious bouts of fear about the liquidity of the system in general, and such problems could then have been managed without disruption to the market as a whole. Thus the need for a central "lender of last resort" to come to the aid of the system as a whole, and "solvent though illiquid" members of it in particular, in times of general crisis would have been, if not eliminated, then certainly significantly reduced.

Nor was the foregoing case for free banking advanced on a purely *a priori* basis. An extensive literature re-examined various episodes in monetary history, and if it did not quite make the case that the analysis advanced in support of free banking in the 1970s was right in every respect, it certainly established beyond reasonable doubt that a great deal of what economists had previously thought they knew about certain crucial facts of monetary history was at least as much the result of viewing them through the prism of conventional views about the inherent instability of systems unfortunate enough to lack central banks as it was of a dispassionate weighing of the evidence.

Centralizing Tendencies Inherent in Banking

According to Bagehot, the Bank of England's unique role in the British financial system of his day arose from the fact that the country's gold reserves were concentrated there and that its liabilities, notes and deposits, had become the principal reserve asset of the rest of the banking system. It was these facts that imposed upon the Bank, a privately-owned for-profit joint stock company, a public responsibility for the system's overall stability. But these facts, Bagehot believed, were the consequences of a particular and uniquely British history of government intervention in the financial system. That is why he presented his analysis as relevant only to Britain, but he was wrong to do this, because he was also wrong to believe that there was no centralising tendency inherent in the nature of banking.

That there was indeed just such a tendency had been sensed as early as 1802 by Henry Thornton, but it was not until 1888, and therefore after Bagehot's death, that its nature was fully set out by Francis Y. Edgeworth in his "Mathematical Theory of Banking". The first two words of this title must have been forbidding indeed to potential readers among Edgeworth's contemporaries - as they perhaps remain even today - which is perhaps why he took pains to explain its central message by use of a most appealing analogy. Consider, he suggested, the problem faced by the chef of a London club. He had to be able to provide dinner on demand to all members who required it, but their number would fluctuate day by day. However, that chef

could rely on two things: first, the more members his club had, the smaller would be the proportional variation in the number of dinners demanded from day to day; and second, his fellow chefs at other clubs in the city faced the same problem. From these considerations it followed that, if those chefs got together and centralised their stocks of ingredients, they could operate more cheaply than if each worked independently. This was not only because of the usual workings of the law of large numbers, but also because, on any given evening, some of the members missing from one club would be found at another, dining as guests of their friends.

And so it was with banks. Some demands on their reserves would come from creditors who wanted to convert deposits into cash, and some would be the result of adverse clearing balances with other banks. Economies of scale were inherent in the holding of reserves, and, as with the chefs, it would pay the banks to pool their reserves and have them managed for the benefit of the system as a whole.

Though he himself did not dwell on this point, Edgeworth's analysis implied that, quite apart from the unintended consequences of a particular history and set of legal restrictions in the particular case of Britain, there is a good economic rationale for the centralisation of reserves within any banking system. This is not to say that much of what Bagehot had to say about the role of the former in the evolution of the Bank of England was not crucially relevant to determining the particular path that centralization took in Britain, but it is to say that what he took to be the configuration of banking in the US - a single layer of banks of rather similar size, each holding its own stock or reserves - was anything but natural, and would not have developed in Britain under any circumstances, as indeed it had not in the US either⁴.

By the 1870s, the US system had already moved a long way towards centralising its reserves, and it was also displaying the same tendencies to periodic crises that were evident in Britain. Rural banks were holding reserves in the banks of the large cities in their regions, and among the latter, New York was beginning to form yet another layer in the pyramid where other city banks held reserves of their own with institutions that also provided crucial links between the domestic and international monetary systems. Canadian banking, furthermore, though operating in a very different legislative environment, was in many respects a component of this US system.

⁴Richard Timberlake (1993) provides an underappreciated but thorough and perceptive account of the evolution of the US monetary system from the days of Alexander Hamilton up to the early 1990s

A good case can be made that crises occurred in Britain in the 19th century because the Bank of England would not exercise the responsibilities that its place in the system imposed on it, but though it is tempting to argue that the problem was even more intractable in the US because no similar institution even existed there to take on the job, this would not be quite right. In the US system, as Richard Timberlake (1993, ch. 14) shows, the role analogous to that assigned by Bagehot to the Bank of England could, and sometimes was, taken on by the clearing house associations through which the banks of the larger cities transacted with one another, and for a similar reason: those banks tended to pool some of their reserves with the clearing house, which was then in a position to manage them on behalf of its members.

This is not to say that the clearing house associations were always good managers. Indeed, it has long been accepted that their behaviour during the 1907 crisis, which gave a considerable impetus to the foundation of the Federal Reserve System, was particularly inept, and certainly worse than in 1873.⁵ But we need to keep a certain sense of perspective here. If we follow conventional wisdom in treating the Baring crisis of 1890 as marking the final emergence of the Bank of England as a credible central bank, we must also concede that this was the culmination of more than a century of trying to get things right. Furthermore, a comparison of the performance of American clearing house associations in 1907 with that of the Fed. in 1929-32 hardly favours the latter. Had they been given a little longer to learn, the clearing houses might well have emerged as competent executants of what we usually think of as some of the key functions of a central bank, notably that of lender of last resort, and perhaps the New York house might have ended up providing such services to the system as a whole.⁶

The foregoing argument is relevant far beyond the specific history of the United States' monetary system. Rather, it amounts to a conjecture that, as a general matter, market mechanisms, left to themselves, are capable of creating a stable monetary system unaided by the activities of government, beyond those aimed at providing a legal framework of well defined property rights buttressed by sanctions against theft and fraud.

And yet, the argument is not quite complete. Though it makes a plausible case that such a

⁵This is a view that goes back at least to Oliver Sprague (1910)

⁶And, it should be recalled, that the Depression saw no bank failures in Canada, despite the absence of a central bank during its early, but crucial, years. The existence of branch networks, co-operation among banks, and perhaps regulatory forbearance, kept the system viable.

system would be capable of providing a good measure of monetary stability, based on commodity convertibility kept in place by the self-interest of individual banks, the key role it assigns to the clearing system and the centralisation of reserves there seems to imply that such arrangements are prone to a natural monopoly problem. Access to the business of banking on a competitive footing would appear to depend upon access to the clearing system, and in an exercise in conjecture such as we are here pursuing, it is surely fair to ask whether some form of government intervention might not be called for to regulate the clearing house. Or to put it another way, an institution evolving from market forces to perform some of the functions that we associate with actual central banks might, by force of necessity, have acquired another of their features, namely being the object of government control.

20th Century Central Banking

Whether market mechanism might indeed have been capable of evolving and supporting stable monetary systems unaided by government must remain an open question in the face of the simple fact that the history of the twentieth century did not permit the experiments that might have settled it to be carried out.

Underlying the free banking scenario is the hypothesis that such a system would have guaranteed the stability of the value of its liabilities by offering some kind of commodity convertibility. But commodity convertibility (predominantly in the form of the gold standard) as an unquestioned fact of monetary life did not survive World-War-1. In the real world, governments have functions beyond the purely economic, and, after 1914, the exigencies of war finance forced governments almost everywhere to subordinate the preservation of monetary stability to other more pressing needs, while after 1918, the system proved to have become too badly dislocated to be mended with the tools available within the post-war international political system.

But there were other reasons for the demise of the gold standard, and these had deep roots in economic ideas. The monetary debates of the second half of the 19th century, and particularly the controversy about bimetallism, generated great advances in our understanding of how commodity convertibility worked, and, as I argued in Laidler (1991), by demystifying the gold standard in particular, they robbed it of much of its moral and political authority. From being, in Thomas Tooke's (1844) phrase "the *sine qua non* of a sound monetary system", gold convertibility became simply one among several possible foundations upon which a monetary order could be built, and one that seemed to have a number of apparent drawbacks as well, two

of which are crucial in the present context.

The first of these was noticed even in the 19th century, by, for example Alfred Marshall (1887): namely, that gold convertibility at a fixed price was not, after all, necessarily the best way of guaranteeing domestic price-level stability, and that in designing alternative monetary arrangements, a choice between the two objectives might have to be made. The second was also well known in the 19th century, but attained great practical importance from 1914 onwards: namely that gold convertibility, and indeed commodity convertibility of any sort, would prevent governments from using their monetary systems as sources of revenue. As economics developed from the 1920s onwards, it also became apparent that it would prevent them using monetary policy to attain other goals, notably on the output and employment front.⁷

By the 1950s, developments in economics had created something close to an intellectual consensus, well represented in Canadian literature by H. Scott Gordon (1961), according to which, rather than have a monetary system designed to limit the actions of government, its configuration should be such as to help the government pursue a wide range of undoubtedly worthy goals that electorates set for it. No policy apparatus that lacked a central bank, preferably working in close co-operation with other branches of government, seemed complete, and those who questioned this seemed to be either hopelessly unenlightened representatives of conservative political interests, or other-worldly intellectuals. The simplest thing that can be said about the place of ideas about free banking in an intellectual market place dominated by such views is that there wasn't one.

Highlights in the Bank of Canada's History

The Bank of Canada was founded while this intellectual consensus was still developing. That is probably why it was mandated to provide both a stable external value for the currency, and a measure of stability to the domestic economy as well. In 1935, informed opinion had not given up hope for the gold standard, even though it was already alert to the possibilities of activist stabilisation policy, nor had it yet swallowed the idea that, because fiscal measures could also be

⁷Free banking is not, of course, dependent upon gold convertibility *per se*, as has already been noted in fn. 3 above. Hence the weakening of support for the gold standard among economists should not, and did not, affect the popularity of such ideas. What really consigned them to the fringes of intellectual respectability was the development of a consensus that monetary policy was an essential tool of a generally interventionist macroeconomic policy.

directed to the latter end, a high degree of subservience of the Bank to elected governments would be desirable. Indeed, the fact that the Bank was initially set up with significant private ownership suggests that its founders also took a large degree of independence on its part for granted.

As we know, the Bank became a crown corporation in 1938, without any attention being paid to modifying its governing legislation to clarify the division of policy responsibility between it and its new sole-owners, and as we also know, this would in due course lead to serious trouble at the end of the 1950s in the form of the Coyne affair.

There is no space here to go into the many convoluted details of this series of events. Suffice it to say that, though Governor Coyne's monetary policies were based on an uncertain grasp of the inter-relationships among Canadian interest rates, domestic saving, international capital movements, and hence the growth of foreign ownership in the Canadian economy, he also held strong doubts about the possibility of using macro-policy in the pursuit of goals for real economic variables. His scepticism on this latter score was completely at odds with the activist views that dominated the economic thinking, not just the of government of the day, but of informed opinion in general, and played a significant role in precipitating a clash of unreconcilable opinions about both the content of Canadian monetary policy, and the appropriate division of responsibility between government and Bank for its design and conduct. Something had to give, and in the short-run it was the Governor, who was forced into resignation in 1961.

Thereafter, however, the Bank remained protected from becoming completely subservient to domestic macro-economic goals by the interaction of a widely perceived political necessity of maintaining the exchange rate peg that had been put in place in the immediate aftermath of the exchange rate crisis in which the Coyne affair culminated, with the *dual responsibility doctrine* that had been agreed to in its wake.⁸ Even after the Canadian dollar was again floated in 1970 - upwards be it noted - the protection provided by this doctrine remained, and the Bank of Canada never became as completely subservient to government policy as did, say the central banks of the UK, Australia or New Zealand. That is perhaps one reason why, bad

⁸To a significant degree the doctrine is the creation of Louis Rasminsky, who succeeded Coyne as Governor. It has two pillars, the so-called directive power of the Minister of Finance, ultimately enshrined in an amended Bank of Canada Act in 1967, which allows the Minister to exercise final authority over monetary policy only by issuing a specific, written and public order to the Governor, and a clear understanding, not written into the Act, that upon the receipt of such a document, the Governor will resign. This arrangement gives both parties strong incentives to settle policy disagreements in private, and it has never been tested in practice.

though it was, Canada's experience during the years of the great inflation of the '70s and '80s was nevertheless somewhat more comfortable than theirs. Only somewhat, however, and Canadian experience in the '70s and '80s made its own contribution to a large body of evidence that seemed to warn of the dangers inherent in setting an over-ambitious agenda for monetary policy, and about the difficulty of finding a viable and simple alternative.

By the end of the 1980s, the relevant lessons had been learned, and, in the wake of Governor John Crow's memorable (1988) Hanson Lecture, debates about monetary policy began to focus on the creation and maintenance of price stability as its only goal. The outcome of these debates, a regime centred on an inflation target of 2 per cent per annum for the consumer price level, fell somewhat short of Crow's aspirations, but as Laidler and Robson (2004) have documented, this regime has proved to be both largely successful and durable too. These issues need no further discussion here, but certain aspect of Canada's central banking regime are nevertheless intriguing: namely, the extent to which it has developed features in common with free banking, and the extent to which, where these differ, central banking seems to have an advantage.

Points of Contact between Canadian Central Banking and Free Banking

As we saw above, a fully developed free banking system would seek to deliver price level stability, not because any central agency decreed it, but because the self interest of individual banks operating in a competitive environment would lead them towards such an outcome. Such stability would most likely be guaranteed by commodity convertibility of some sort, and the reserves needed to make such a guarantee credible would be held centrally, probably at a clearing house association that was, in turn, subject to some minimal government regulation designed to ensure competition among its members.

Transactions among banks would likely be carried out using deposits at the clearing house that represented claims on those reserves, which themselves would actually be needed only for transactions with outside entities. There would have to be an interbank market in those deposits to enable the system to function smoothly, and it is likely that the clearing house association, if it was to be able to exercise lender of last resort powers, would have the power to grant overdrafts to members, a power that commodity convertibility would keep safe from abuse, but also perhaps render less effective in a real emergency. Within such a system, commercial banks would be free to manage their own deposit and note issue business, which might also be subject to regulations designed, at a minimum, to prevent fraud.

Until recently, such a regime apparently differed sharply from any based on central banking, which seemed to have been specifically configured to enable policy goals to be set by the central bank and/or its political masters, goals whose pursuit would be likely to compromise price stability. Before the 1990s, moreover, there was much empirical evidence available to support this view.

This once crucial distinction between free banking and central banking has largely disappeared in the Canadian case with the adoption of low inflation as the sole aim of monetary policy. If, furthermore, we look at the framework within which monetary policy is actually conducted nowadays, it is apparent that the clearing system plays essentially the same role within it as it would under free banking. Interest bearing deposits with the Bank of Canada (rather than with a clearing house) are the medium in which clearing imbalances are settled, there is an interbank market in such deposits, moreover, and the Bank of Canada can and does grant overdrafts to participants in it. Instead of a convertibility constraint, however, it is the Bank's obligation to keep inflation on track that prevents abuse of this privilege.

Canada's current monetary order nevertheless differs in other respects from one based on free banking. For example, the Bank (together with the Royal Canadian Mint) has a monopoly in the issue of currency, which is nowadays the institution's main source of revenue. But since it supplies currency on demand to the market, this hardly raises the financial stability issues that such a monopoly did in the 19th century. It is worth noting, furthermore, that the Bank's monopoly over currency would disappear should perfectly legal "electronic currency" schemes, such as *Mondex*, ever catch on with the public. Were this to happen, the main question it would raise would be how to pay the Bank's operating costs. It would not alter Canada's overall monetary order on any significant way, and it is therefore hard to get excited about this matter.

A second, potentially more important difference is that the Bank of Canada is currently mandated to act as the federal government's agent in the markets for foreign exchange and public debt. Under free banking, these roles would be played by private institutions, as indeed they were before the Bank's creation. In theory, current arrangements pose an ever present threat to the Bank's ability to pursue its assigned inflation targets, because it is not hard to conceive of instructions that the government might issue that would undermine monetary stability. However, it is hard to see how this could become a practical issue under the current inflation targeting

⁹The clearing system is actually the creature of the Canadian Payment's Association rather than the Bank of Canada, to be sure, but this division of administrative responsibilities is surely a legacy of central banking and has little substantive significance.

regime, for the simple reason that this is a joint project of the Bank and that same government, and is also subject to the dual responsibility doctrine.

The major difference between central banking as it is currently practised in Canada and any viable free banking alternative undoubtedly lies in the institutional underpinnings of the assurances of orderly price level behaviour that these two arrangements offer to the public: administratively mandated inflation targets under central banking as opposed to a convertibility guarantee under free banking. Here, comparisons must rest on the relative quality of the two guarantees. It is hard to disagree with the free banker's argument that a promise that emerges naturally from market processes is likely to be more credible in the long run than one that is the result of an agreement between elected politicians and a central bank. Against this consideration, however, a number of other factors come into play.

First, if monetary stability really is what agents want, it seems likely that, once political processes have delivered that outcome, it will become quite hard to undermine it again through those same processes: inflation targets have now been in place for fifteen years in Canada, they have been met, and there is much less public scepticism about them now than there was in their early years. Nor must we forget that, even in the heyday of the gold standard, some very distinguished commentators - for example Alfred Marshall (1889), Irving Fisher (1912) and Knut Wicksell (1898) - noted that it was not the ideal scheme for generating price stability, and proposed alternatives. Wicksell, in particular, went so far as to advocate the complete abandonment of any kind of convertibility and its replacement by a regime in which central banks used their control over domestic interest rates to deliver the desired end, a system that is surely the intellectual prototype of present day arrangements. Finally, it is worth recalling that gold is nowadays a traded commodity, whose market price is very sensitive to variations in monetary arrangements, so it is hard to see how it could suddenly be used to provide an anchor for those same arrangements.

Though there are many other kinds of commodity convertibility, these are, as noted earlier (fn. 3) complicated and hence hard to explain to the public at large. That is one reason why all recent proposals for reforming Canada's monetary order that envisage replacing inflation targets with a system underpinned by convertibility, rest not on a commodity of any sort, but either a brand new North American currency or the US dollar. Given the United States' total lack of interest in giving up a shred of control over their own currency, let alone abandoning it for something else, the only proposals among these that are practically possible are those involving either the outright unilateral adoption by Canada of the US dollar as its currency, or the creation of a new Canadian currency linked to the US dollar by way of a currency board. From the

perspective of this paper, the adoption of either of these would amount to a further step in an evolutionary process that has already seen the Canadian model of a monetary system anchored by a central bank move significantly in the direction of the "free banking" alternative.

Concluding Comment

This is no point in rehearsing recent debates about these matters here. ¹⁰ It is not out of place, however, to note that neither unilateral dollarization nor the creation of a currency board would in fact lead to the disappearance of central banking for the Canadian system, but only to the replacement of the domestically located Bank of Canada by the United States based Federal Reserve System, which would continue to set goals conceived purely in terms of the behaviour of the United States economy, with no regard to their consequences for Canada. For many, this possibility will be reason enough to conclude that Canada has proceeded quite far enough down the road to free banking already, and to wish the Bank of Canada "many happy returns" on this occasion with particular enthusiasm.

¹⁰See Laidler and Robson (2004) for a recent discussion of these debates, and references to key contributions to them.

References

- Bagehot, W. (1873) Lombard Street: a Description of the Money Market, London, P. S. King
- Courchene, T. J. and Harris R.G. (1999) From fixing to monetary union: options for North American monetary integration, *C. D. Howe Institute Commentary* 127, Toronto, C. D. Howe Institute
- Crow, J. (1988) The work of Canadian monetary policy, Eric. J. Hanson Memorial Lecture delivered at the University of Alberta, *Bank of Canada Review* (Spring)
- Edgeworth, F. Y. (1888) The mathematical theory of banking, *Journal of the Royal Statistical Society* 51 (March) 113-26
- Fisher, I. (1912) *The Purchasing Power of Money* (2nd ed.) New York, Macmillan (1st ed. 1911)
- Friedman, M. (1960) A Program for Monetary Stability New York, Fordham University Press
- Gordon, H. S. (1961) The Bank of Canada in a system of responsible government *Canadian Journal of Economics and Political Science* 27 (Feb.)
- Grubel, H (1999) The case for the Amero: the economics and politics of a North American monetary union *Critical Issues Bulletin* Vancouver, the Fraser Institute
- Hayek, F. A. von (1976) *Denationalizing Money*, Lonsdon, Institute for Economic Affairs (2nd ed. 1978)
- Klein. B (1974) The competitive supply of money, *Journal of Money, Credit and Banking* 6, (November) 423-53
- Laidler, D. (1991) The Golden Age of the Quantity Theory, Hemel Hemptstead, Philip Allan
- Laidler, D. and Robson W. B. P (2004) *Two Percent Target: Canadian Monetary Policy Since* 1991. Toronto, C. D. Howe Institute
- Marshall A. (1887) Remedies for fluctuations in general prices, *Contemporary Review*

- Selgin, G. and White L. (1994) How would the invisible hand handle money? *Journal of Economic Literature* 22 (Dec.) 1718-49
- Smith, V. (1936) The Rationale of Central Banking, London
- Sprague, O. (1910) A History of Crises under the National Banking System Washington D. C., Government Printing Office
- Thomson, E. (1974) The theory of money and income consistent with orthodox value theory, in G. Horwich and P. A. Samuelson (eds.) *Trade, Stability and Macroeconomics: Essays in honor of Lloyd A. Metzler* New York, Academic Press
- Thornton, H. (1802) An Inquiry into the Nature and Effects of the Paper Credit of Great Britain London
- Timberlake, R. H. (1993) *Monetary Policy in the United States: an Intellectual and Institutional History* Chicago, University of Chicago Press (first ed. 1974)
- Tooke, T. (1844) *An Enquiry into the Currency Principle* London, Longman, Brown, Green and Longmans.
- White, L. H. (1984) Free Banking in Britain Cambridge, Cambridge University Press
- Wicksell, K. (1898) *Interest and Prices* (tr R. F. Kahn) London, Macmillan for the Royal Economic Society, 1936