FREE BANKING

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Abstract

"Free banking" is a system in which unregulated banks can issue currency and transferable deposits redeemable in a common base money. Based on historical episodes occurred before the establishment of modern central banks the theory of free-banking points to redeemability - hence to increasing marginal liquidity costs - as the discipline device against over-issue. Free banking is not only alternative to central banking but it also greatly diverges from the "fiat type" currency competition theories. The main predictions of the free banking model concern the correction of single banks over-issue and of in-concert expansion, the demand elasticity of currency supply and the independence of the stock of money from changes in the currency/deposit ratio.

Definition

Free banking refers to the competing issue of redeemable currency notes (and transferable deposits) by unrestricted commercial banks. Historically free banking developed during the gold standard regimes so that paper notes issued by private banks were redeemable in gold or silver coins; such was the case for example of Scotland (1716-1844, Canada 1817-1914). In that setting the debate opposed the free issuance of banknotes redeemable into gold to the monopolization of issuance by a central bank.

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The modern theory of free banking advocates the bank issuance of banknotes and deposits redeemable in a common base money, which defines the unit of account and serves as the banking system ultimate means of settlements (Selgin and White, 1994).

Theories of competitive money issuance

Competitive money issuance as an alternative to central banking has been upheld by various theories. However there are striking differences among the models of currency competition which impinge on the very rules on which the monetary regimes rely. The main distinction is between models envisaging competition among fiat-type money and models resting on notes redeemability.

A strand of money competition theories (Hayek 1978, 1990; Klein 1974) focuses on the decentralized supply of fiat-type money. In these models money issuance is not constrained by banks' reserves. In Hayek the issuers produce fiat money under brand names which are legally protected and commit to a stable purchasing power of their money - which is not redeemable - in term of a basket of commodities. Competition for customers guarantee that the promise is enforced; whenever the currency loses purchasing power the issuer loses customers and is then obliged to curb issuance. Financial press would contribute to informing customers about the quality, i.e. the purchasing power, of money.

Hayek's model rely on the issuers' reputation and credibility as a discipline device. However such a regime is not free from time consistency problem (see for example Taub, 1985) due to the impossibility of writing and enforcing a contract stipulating the future quantity of money to be issued.

The competing money theories based on redeemability rest on reserve depletion in case of over-issuance as a discipline device. The free banking model falls in this group and it is based on the "direct" redemption of the currency into the base money; other models of currency competition advocate indirect redemption (Dowd, 1996;

Greenfield and Yeager, 1983). According to the Greenfield and Yeager "indirect" convertibility model, unregulated financial institutions would issue notes and checking deposits denominated in a Unit defined on a bundle of good and services; however notes would be redeemable in some convenient redemption medium, like gold, in amount determined by the value, at market prices, of as many standard bundles as the Unit denominations of the banknotes and deposits being redeemed. In other works the unit of account would be different from the unit of redemption. In this way money supply would be determined by the demand side and monetary disequilibrium would be avoided.

The free-banking model

The assumptions

The free-banking model has been formally developed by Selgin and White (1994) on the basis of historical episodes of unrestricted issue of currency redeemable in gold or silver by private competing banks. The model rests on the following assumptions: banks can offer any kind of financial instruments, included notes and deposits, free of statutory requirements and without entry barriers; notes issued by the various banks are distinct but equally redeemable at par in a common money, such as for example a frozen base of fiat base money; consumers have preferences over particular brands of notes. It is worth noticing that because of par redemption consumers' preference for a particular brand does not imply accepting that note at a particular exchange rate; acceptance implies the decision to retain the favored notes in one's asset portfolios while unwanted notes will be spent or deposited. In addition, the banks join a central clearing house where they redeem notes from competing banks.

The assumptions of par acceptance and common clearing system deserve some discussions. Both institutions are related to the profit maximizing issuing banks so

that their emergence has not only been a mere contingency during the historical episodes of free banking; they are predicted by the theory.

At par notes acceptance and common clearing arrangements

Par acceptance would emerge in a free banking system in a number of ways. First of all banks would gain from note changing activities because by swapping their own notes for other banks' they would maintain a larger stock of their notes in circulation; par acceptance would then be the outcome of a competitive process by note changing banks. "Note dueling" strategies, i.e. the aggressive purchase of the notes issued by other banks followed by their sudden return for redemption, would occur causing each bank hold costly reserves to meet the aggressive demands for redemption by the other banks. In this scenario, mutual par acceptance would allow banks to economize on reserves. Par acceptance could also be established by pacts between banks recognizing the mutual gains in the marketability of their notes. System-wide notes par acceptance would imply also the emergence of a common clearing system allowing banks to reduce reserve holding (White, 1999).

Limits to note issuance by a single bank

On the basis of the above listed assumptions, the free banking theory predicts that there is a limit to the equilibrium quantity of the bank-issued notes. Increasing the volume of currency (or deposits) in circulation implies increasing the claims against the issuing bank and so the probability of adverse clearings. The banks' reserves will shrink. Increasing marginal liquidity costs, i.e. the expected value of costs incurred if the bank runs out of reserves, limit the bank capacity to expand notes in circulation.

The mechanism runs as follows. Assuming that the total demand for note balances for the single bank is given in the short run, any note issue which is not driven by an increase in the demand will causes an aggregate excess of currency supply. Notes

in excess will be: i) directly redeemed; ii) deposited in another bank or in the issuing bank; iii) spent in transactions. Although the case of direct redemption is less frequent in mature systems where consumers tend not to hold reserve money, the deposit or spending channels will translate into claims against the issuing banks anyway - and into a loss of reserves.

In case the excess currency is deposited in another bank the recipient will claim the notes for redemption at the clearinghouse; the return of the excess currency to the bank will decrease notes circulation immediately (reissuing excess notes will not profitable since it would entail further shrinking of reserves).

On the other hand, if excess notes are spent they will be deposited in the bank by the recipient, say a retailer, exactly the way it happens with checks. The deposit accounts of retailers act then as a "note filtering device"; excess notes are deposited into other banks and finally enter the clearing systems (Selgin, 1988).

The assumption of consumers preferences play a crucial role in the model, as it ensures that the expanding bank suffer adverse clearing after creating a note surplus; absent the assumption on note brand discrimination the notes issued by the bank which has caused excess of supply could not return to the issuing bank. It must be underlined that consumers preferences refer to the holding and not to the acceptance of notes in payment; the relevant assumption for the correction of overissue is that consumers have brand preferences on which notes spend off and which notes hold when the find themselves hold more notes than desired.

In-concert expansion

If the risks of adverse clearing and reserve losses limits the profit-maximizing bank issuance, what about the possibility of notes expansion by the system as a whole? If all the banks in the system expanded currency supply the expected value of net adverse clearing would be zero. However, payments and reserves losses are stochastic; individual banks faced with sufficiently high short run reserve adjustments will

then have a positive precautionary demand for reserve even if the expected value of net reserve losses is zero. Building on the literature on precautionary reserve demand dating back to Edgeworth (1888), Selgin (1994) assumes that the bank demand for reserves is proportional to the standard deviation of its reserve losses; in-concert expansion increases gross clearings and hence the risk of reserve depletion perceived by the banks. As the quantity of reserve in the system is limited the banks will cope with the risk of reserve losses by contracting their liabilities. A result of the free banking model is that a unique equilibrium volume in the system liabilities exists.

Demand shifts

The adequacy of note issuance by unrestricted banks is not a matter of supply but depends also on the demand side. Here again the demand for money refers to the desire to hold money balances and not just to receive money in exchange of goods and services (Selgin, 1988).

A decrease in the demand for notes ceteris paribus brings about a situation of notes over-issue and will be corrected according to the above described process. Here again a rise in the demand for money can be a rise in the demand for the notes issued by a single bank or a generalized demand for notes holding.

In the single bank case, an increase in the demand for notes issued by a bank means that the customers want to hold a larger quantity of a particular brand of notes. This translates into positive clearings for that bank, whose reserves are now greater than desired. Expanding notes issuance will return banks reserves to the desired level.

In the case of generalized increase in the demand for notes, the increase in the amount of notes held by the public implies a decrease in the spending of notes, hence a decrease in gross clearings. The probability of reserve depletion for any

given starting level of reserves also decreases implying that banks can expand their liabilities until reserves return to the desired level.

In other words the model predicts that both the single bank and the overall notes supply are demand-elastic.

Shifts between deposits and currency

One distinguishing feature of the free-banking model refers to the consequences of a change in the currency-deposit ratio. If banks can issue both currency and deposit as liabilities changes in the currency-deposit ratio produce shifts from on type of liabilities into another without affecting the actual stock of bank reserves. If the marginal liquidity costs for currency and deposits is the same any change in the bank liability mix will not alter the desired reserve ratio. As a result the money multiplier is independent from the currency-deposit ratio. Conversely in conventional central banks regimes the currency-deposit ration alters the equilibrium quantity of money; if the public hold high powered money which constitutes also banks reserves, any attempt to draw currency from deposits will force banks to contract their balance-sheet absent a prompt and adequate base money injection by the central bank (Selgin, 1994).

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