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Guest Editorial: Cruickshank Report: Review of Banking Services in the UK
Kevin Keasey and Helen Short

Fitness and propriety in financial services in the 21st century
John Virgo and Philip Ryley

Proposals for the regulation of statutory audit in the European Union: A commentary
Ian P. Dewing and Peter O. Russell

Deposit insurance: Is it a plausible option for the Eastern Caribbean Currency Union?
Tracy D. Polius and Amos C. Peters

Insurance contract law and regulation and competition in the UK insurance industry: The missing link
Lisa Martine Bowyer

Early warning systems: Helping to steer a safer course
Allan Smith

Banking regulation in an era of structural adjustment: The case of Nigeria
Chibuike Ugochukwu Uche

Desired vis-à-vis required interim disclosures
Hannu J. Schadewitz, Antti J. Kanto, Hannu A. Kahra and Dallas, R. Blevins

Regulatory and legal commentary
Joanna Gray

HENRY STEWART PUBLICATIONS
Deposit insurance: Is it a plausible option for the Eastern Caribbean Currency Union?

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Abstract
This paper examines the structure of the financial system in the Eastern Caribbean with a view to determining whether deposit insurance is a feasible alternative. It is argued that as the financial system deepens within the context of a liberalised environment the probability of systemic risk increases considerably. Against this backdrop, we find that deposit insurance may have a role to play in the Eastern Caribbean.

Introduction
In this paper we present a discussion on the need for deposit insurance, within the context of the Eastern Caribbean Currency Union (ECCU). Whether or not a country should adopt deposit insurance to protect the financial system from bank failures is a seriously debated and thoroughly researched issue. We therefore confine our scope of analysis to the specific circumstances of the Eastern Caribbean subregion.

The ECCU consists of eight territories, six of which are independent. They share a common central bank, namely the Eastern Caribbean Central Bank (ECCB). Since 1976 the ECCU has maintained a fixed exchange rate of US$1 to EC$2.71, which has brought about stability and confidence in the system. The benefits conferred on the countries through the operations of the currency union have also provided the framework for remarkable growth and improvement in the standard of living in this region.

In short, the success of the region is predicated on the design of its financial framework. The central bank’s primary objective is to pursue an exchange rate target. This implies that the ECCB is a quasi-currency union board. During any given period the foreign exchange cover of the Eastern Caribbean dollar is not significantly different from 100 per cent. Lending to governments as well as other financial institutions is limited by the ECCB Agreement Act 1983. The number of governments involved in the currency union ensures a certain amount of autonomy for the ECCB. Further, the inability of any individual government to monetise their debt is a constraint that forces governments to practise fiscal discipline.

The ECCU, however, has virtually no financial markets and very limited financial instruments available. The region's
The economy has managed to grow with relatively unsophisticated consumers of financial services.

Essentially, we argue that improvements in technology, freer trade, liberalisation of our own environment, increased alternatives and increasing financial sophistication of our consumers all increase macroeconomic risks and risks of systemic failure. It is against this backdrop that we consider the costs and the benefits of deposit insurance in the region. We weigh this consideration with the costs and benefits of strengthening the regulatory framework in the region.

**ARGUMENTS FOR AND AGAINST DEPOSIT INSURANCE**

The discussion on whether or not any financial system needs deposit insurance hinges on the fact that most financial systems have inherited a system of fractional reserve banking which is an inherently fragile and potentially unstable system of financial intermediation. One of the basic characteristics of fractional reserve banking arises from a perceived externality. For instance, a single bank failure that involves losses to depositors may cause other depositors to panic and withdraw their funds from other banks. If enough depositors demand their funds from banks, even the most conservative bank will not be able to meet its obligations. The failure of one bank by way of contagion effects on other banks can have serious disruptive consequences for the entire financial system. In this section we summarise the major benefits and costs of deposit insurance.

**The benefits**

Deposit insurance reduces the chance of a bank panic and the attendant contagion effects that a run on one bank can impose on the entire banking system. It contributes to financial stabilisation by encouraging confidence in the financial system and by isolating the effects of single bank failure.

Deposit insurance protects small depositors, for whom it is not cost effective to obtain sufficient information about the condition of a bank. This is especially beneficial from a social point of view, where the loss of savings would result in a fall in consumption for a vast cross-section of the society.

In the presence of deposit insurance, depositors are more likely to retain a larger proportion of their financial resources within the banking system as they are likely to have greater confidence in the safety of their assets. This reduces the cost of resource mobilisation for depositary institutions and hence the cost of borrowing. This, one would expect, would have an expansionary effect on savings and investment, leading to improved growth performance. Moreover, since savings (deposit) act as a store of value and a method of deferred payment, deposit insurance also protects the payment system and prevents reversion to a cash system.

Deposit insurance schemes promote competitive efficiency. They do this by enabling small, 'local', and newly established banks to compete with depositary institutions that benefit from the 'too big to fail' implicit guarantee. In the absence of deposit insurance the failure of large institutions may be perceived to have such a substantial impact on the economy that the government would bail them out. In the case of developing countries, the head offices of foreign banks may step in to rescue them in order to save their reputation. Agents therefore react by concentrating their deposits in the institutions that have the implicit guarantee, thus leaving small banks at a considerable disadvantage and effectively being a barrier to entry to new banks.

In the event of a bank failure, explicit limited deposit coverage reduces the outlay of a government or central bank relative to an implicit guarantee 'bail out'. The cost
burden is shifted to the beneficiaries and members of the deposit insurance, as opposed to the situation that obtains with implicit guarantees from governments or central banks.

Finally, deposit insurance serves as a complementary policy instrument to the lender of last resort function of the central bank, while providing a formal rules-based methodology for resolving bank crises. It thereby reduces high resolution costs that are often associated with regulatory discretion. Rules provide equity and fairness, but they also often translate into improved regulatory and supervisory legislation.

The costs
There are two major costs associated with deposit insurance and they arise because of the existence of information asymmetries. These are adverse selection and moral hazard. Adverse selection occurs when the agents who are most likely to produce the adverse outcome insured against are those most likely to take advantage of the insurance policy. Moral hazard refers to the incentive the insured have to take on additional risks that may result in an insurance pay off. Adverse selection occurs when deposit insurance is voluntary and premiums are not risk adjusted (flat). Conservative banks will leave or not opt to take insurance. This will leave only weak banks covered by deposit insurance and may raise premiums even further causing another cohort of banks to leave. This leaves behind very high risk banks, the ones most susceptible to failure.

Moral hazard is a major concern of deposit insurance arrangements. The greater the coverage of deposit insurance, the greater the moral hazard. The lower the coverage, the higher is market discipline. Depositors who know that their deposits are protected have no incentive to monitor the soundness of the banks and, indeed, are more likely to place their money with riskier banks that offer a higher return. This in itself is destabilising. Likewise, the management of the banks are more likely to take on additional risks and this incentive becomes stronger the closer a bank gets to insolvency since risky behaviour will reap benefits but, in the event of adverse circumstances, they will not share the cost.

STRUCTURE OF THE ECCB FINANCIAL SYSTEM
The financial system of the countries within the ECCB area is not very sophisticated in terms of the range of financial institutions and financial instruments. The financial institutions in existence as at December 1998 are the Eastern Caribbean Central Bank, commercial banks, development banks, insurance companies, credit unions, offshore banks, national development foundations and the Eastern Caribbean Home Mortgage Bank. As at December 1994, there were 368 financial institutions in the system. Insurance agencies accounted for about half (152) the total number of institutions in the system and they are well spread across the islands. Insurance companies, however, only accounted for about 4.6 per cent of the total assets of the financial system as at December 1995. The insurance market is dominated by agencies of companies incorporated in other CARICOM countries and in the metropolitan centres.

Credit unions and commercial banks are the next largest groups in terms of the number of financial institutions. Commercial banks hold the largest share of assets in the financial system accounting for about 64 per cent of total assets in 1995. They therefore dominate the financial sector in terms of credit creation and savings mobilisation. Credit unions are important non-bank financial institutions that were established to provide credit to certain sections of the population. They therefore also
provide a social function and supplement the financial services offered by other financial intermediaries. Credit unions accounted for about 3.2 per cent of total assets in 1995.

Social securities schemes have been instrumental in mobilising domestic savings in the Eastern Caribbean Currency Union. By 1995 they accounted for about 14.2 per cent of total assets of the financial system. The governments have, however, appropriated large sums from social security funds to finance capital expenditure. Development banks are less visible in the financial landscape and accounted for about 3 per cent of the total assets of the financial system in 1995. They have, however, been used to finance educational, housing and agricultural projects.

The ECCB, in conjunction with the member governments, regulates the financial system. The ECCB is empowered by the ECCB Agreement Act 1983 to regulate banking business, monitor the availability of money and credit, promote and maintain monetary stability and facilitate economic development. The Uniform Banking Act transfers the power of regulation and supervision of commercial banks to the ECCB. The member governments retain powers such as licensing, foreclosure procedures and liquidation. There is separate legislation for the regulation and supervision of insurance companies, credit unions, social securities, offshore financial institutions and other non-bank financial institutions. In most instances the governments have the power to regulate the non-bank financial sector while the ECCB supervises and monitors developments within the sector.

The ECCB has assumed the responsibility of developing the financial system. It was thus instrumental in the establishment of the Eastern Caribbean Home Mortgage Bank in 1995. The ECCB has also adopted a facilitatory approach to the development of the money and capital markets. Plans for money and capital market development include the establishment of a number of capital market institutions such as the Government Securities Market, the Eastern Caribbean Enterprise Fund and the Eastern Caribbean Securities Exchange (ECSE). The establishment of the institutions such as the ECSC and the government securities market would necessitate a robust commercial banking and payment system.

The ECCB agreement confines the ECCB to an operational framework which focuses on the preservation of the external value of the EC dollar. The exchange rate policy of the bank as dictated by the operational framework involves maintaining a fixed exchange rate of the EC dollar to the US dollar. The foreign asset rule is the policy instrument used to achieve the objective of exchange rate stability. The statutory requirement dictates that the ECCB holds at least 60 per cent of demand liabilities in the form of reserves. This, therefore, limits the annual amount of credit that the bank can create. The foreign asset rule, therefore, puts a cap on the amount of credit that can be extended to governments and financial institutions. The foreign asset rule also limits the extent to which the ECCB could finance the development of the real and financial sectors. Thus, the lender of last resort function is constrained by the operational framework of the central bank.

DEPOSIT INSURANCE: DOES THE ECCB AREA NEED IT?

The operational framework within which the ECCB functions has worked considerably well for the region in the past. Under the fixed exchange rate regime the EC dollar has maintained parity with the US dollar from 1976. The region has therefore been characterised by low inflation and financial and macroeconomic stability. The region is, however, highly susceptible to external shocks as the main revenue-generating activities, agriculture and tourism, are
highly dependent on weather conditions and international commodity prices. In addition, the region is now faced with the uncertainty of preferential access for bananas, the subject of much debate between the World Trade Organisation and the European Union.

Until the mid 1980s there were not many significant changes in the structure of the financial system and the operational framework of the ECCB. Thus, the present operational framework was not presented with a significant number of challenges, such as increased exposure and high levels of risk. The 1990s have been characterised by development of the financial system. These developments include the ECCB’s initiatives in the development of the money and capital markets. Other agents in the financial sector have also taken initiatives related to the deepening of the financial system. These include the formation of groups of financial institutions and the expansion of offshore banking affiliates. It is not certain what effect these changes will have on the financial system and the operational framework of the ECCB as the region does not have much experience in this area. It has been argued, however, that as the financial system deepens, risk exposure and the possibility of contagion increases. For instance, financial innovations such as the formation of groups are likely to expose agents to greater risk. This is because the problems of a failing institution within a group can adversely affect other members of the group through debt and lending policies such as concentrated and connected lending. Thus, it is important that the likely effects of financial deepening on the financial system and the ECCB operational framework be taken into consideration when tinkering with the present system.

There is also a movement towards the integration of the markets in the OECS into a single financial space. Trade liberalisation has increased the probability of macroeconomic shocks, thus posing greater pressure on the payment and financial systems. Technological advances will soon make it easier for cross-border trading. This means that individuals within the ECCB jurisdictions will have the option of making financial transactions in other jurisdictions while non-residents of the ECCB area will also have the option of cross-border financial trade with financial institutions in the ECCB area. These developments are also likely to increase the potential for increased exposure and systemic risk.

Deposit insurance improves individuals’ confidence in the system and therefore ensures that a certain amount of savings stay within the jurisdiction. It can be argued that commercial bankers can pass the cost of deposit insurance on to the depositor through increased lending costs. With the development of our financial markets, and globalisation of the world economy, however, Caribbean depositors are likely to have alternative avenues for investment. The presence of deposit insurance encourages depositors to keep their savings within the banking system resulting in a reduction in the cost of resource mobilisation. In an effort to remain competitive commercial banks will have a strong incentive to reduce the cost of borrowing. This implies that deposit insurance may have expansionary effects on both savings and investment and, ultimately economic growth.

Perhaps the strongest argument against deposit insurance is the moral hazard problem. As was mentioned earlier, the introduction of deposit insurance can, through the rational behaviour of financial agents, lead to perverse outcomes. The question really is what is the magnitude of the moral hazard problem without deposit insurance. This we would have to compare with the moral hazard implications of a
deposit insurance system. This amounts to comparing the factual with the counterfactual, which is extremely difficult. The system as it currently operates in the ECCB area, functions with an implicit guarantee. For political reasons governments are likely to guarantee the national banks in the region, and foreign banks are likely to draw on reserves from their head offices to alleviate liquidity problems. In situations where the implicit guarantee offers depositors 100 per cent coverage market discipline will be minimal. Deposit insurance with less than 100 per cent coverage could actually impose market discipline in the ECCB financial area and reduce moral hazard. This will only occur if depositors perceive the coverage to be less than 100 per cent, thus improving the credibility of the scheme.

It has been argued that improved disclosure may impose market discipline on commercial banks and other financial institutions. Because small depositors within this jurisdiction are unsophisticated it is, however, unlikely that improved disclosure will impose any significant form of discipline on financial institutions. In this way deposit insurance may be more effective in protecting depositors from bank failures.

Limited deposit insurance coverage and improved disclosure can assist in imposing market discipline before a bank failure. These measures may, however, have destabilising effects on the financial system. Where it is rumoured that a bank is likely to fail, large depositors who are not covered under the deposit insurance scheme have an incentive to withdraw their funds from the banking system, thus increasing the possibility of systemic failure.

Yet another argument against deposit insurance in the ECCB area is that the multi-island nature of the jurisdiction reduces the probability of contagion, so that systemic failure in the region is unlikely. This argument is supported by the fact that the markets within the region are fragmented. This suggests that contagion would be constrained or restricted to a particular island, so that banking sector problems in one country would be isolated and the resolution costs might actually be less than with a deposit insurance scheme. The intervention of the Bank of Montserrat by the Central Bank in 1993 supports this argument, as the liquidity problems of that bank were restricted to Montserrat. In addition, some of the foreign banks bring some stability to the system, as they are able to draw on the reserves of their head offices during periods of illiquidity. Foreign branch banks are also protected by virtue of the fact that the parent banks belong to deposit insurance schemes.

The above arguments fail to recognise that the region is moving towards the formation of a single financial space where markets are integrated and the probability of contagion across the jurisdiction increases. Further, the multi-island nature of the jurisdiction assists in the diversification of risk under the deposit insurance scheme. For instance, commercial banks in St Lucia may be negatively affected by a banana shock. Commercial banks in Antigua may not, however, be affected by the shock.

The lender of last resort function of the ECCB is constrained by the foreign asset rule. The ECCB is required by law to hold at least 60 per cent of its demand liabilities in the form of reserves. This means that the ECCB can only lend 40 per cent of demand liabilities to governments and financial institutions. In practice, the ECCB maintains a foreign exchange cover of about 98 per cent of demand liabilities, which implies that the lender of last resort function is marginal.

The lender of last resort function of the ECCB is further constrained by s.40(1) of the ECCB Agreement Act 1983, which states that the ECCB can purchase publicly
issued government securities to the extent of 15 per cent of currency in circulation and other demand liabilities. Further, the ECCB may make temporary advances to and purchase treasury bills from participating governments according to certain fiscal criteria. The development of the government securities market in the region is likely to increase the amount of government debt purchased by the ECCB as currently the stipulated limits are underutilised. This limits the amount of funds that the ECCB can lend to financial institutions through its discount window. In situations where the ECCB may have to lend significantly to commercial banks and has to reduce its reserve cover there is uncertainty regarding the extent to which it can be reduced. This is because it is not known at what point the erosion of confidence in the value of the currency will occur, resulting in capital flight and the threat of devaluation.

The above arguments suggest that the current framework is not adequate in terms of dealing with systemic crisis. This really stems from the inability of the ECCB to create systemic liquidity through open market operations and the discount window. This suggests that there is a need for some mechanism to augment the existing framework. Deposit insurance is a plausible instrument if it is properly designed to suit the needs of the ECCB area. A compulsory deposit insurance scheme would complement and augment the regulatory and supervisory functions of the ECCB. It would substantially enhance the ability of the central bank to prevent a crisis and, in the event that one takes place, to manage that crisis effectively and efficiently. The rules would have already been laid down and the powers of the ECCB enhanced. There may be a problem if, as is usually the case, the deposit insurance institution is permitted to borrow extensively from the ECCB to meet short-term demands. We do not anticipate a problem, however, because a deposit insurance scheme can function effectively with borrowing limits, and can outsource funds, once the central bank will guarantee the loans. The money can be repaid in the usual way by levying fees on financial institutions and governments, after the crisis has occurred.

The need for deposit insurance is made even more critical when we consider the strength of the regulatory framework of the ECCB area. First, the scope of the ECCB supervision is limited to the commercial banking sector, which leaves other depositary institutions such as credit unions, insurance companies, development banks and savings and loan firms under-supervised. While the ECCB monitors developments within the non-bank financial sector, the participating governments are the official regulators of this sector. In most instances, governments are not equipped with the financial resources and technical competence to effectively monitor the non-bank sector. This situation has resulted in the underregulation of the non-bank financial sector. With regards to the supervision of commercial banks the legislative power of the ECCB is restricted as the governments retain the power to license, foreclose and liquidate. Moral suasion is the main tool used to ensure that commercial banks comply with regulatory standards. This implies that the ECCB cannot force commercial banks to comply and therefore constrains its ability to prevent bank failures.

CONCLUSION AND POLICY OPTIONS

The paper has argued that, with careful implementation and design, deposit insurance can confer significant benefits on the ECCB area. Experience has indicated, however, that the moral hazard problem does increase after the implementation of a deposit insurance scheme. It has also been
argued that the implicit guarantee, which currently exists in the system, does provide for some degree of moral hazard. The deepening of the financial system and the process of financial liberalisation are likely to increase the level of risk and exposure and the probability of contagion within the system. Experience in East Asia, Jamaica and elsewhere has shown that the cost of financial restructuring and crisis resolution is very high and is often a burden on the governments in question. Thus, there is a need for mechanisms that will protect small agents within the system from loss of their deposits and savings.

There are two options available to the ECCB area to reduce the possibility of risk and contagion and protect small agents from asset losses. First, there is the option of strengthened regulation and disclosure, where a single monetary authority supervises and monitors all financial institutions. This option will reduce regulatory costs and also address inconsistencies in various pieces of legislation in the various countries. Within the context of a liberalised environment, however, heightened regulation of the financial sector may lead to financial repression and impact negatively on growth. Improved disclosure may not serve to protect small agents within the system since they may not be able to use the information to make appropriate financial decisions. Secondly, deposit insurance as an addition to the current regulatory framework can be implemented to reduce the probability of bank failures and to impose discipline on financial agents. Deposit insurance will also serve to enhance confidence and improve credibility of the financial system and formalise the procedure for dealing with insolvent financial institutions within the system. The second option seems more plausible as it will impose minimum cost since it will not involve a complete reorganisation of the regulatory structure. A deposit insurance scheme will also facilitate the improvements in information gaps with regard to financial institutions that are covered under the scheme.

The question, therefore, is how to obtain the benefits of deposit insurance and avoid the associated ills. The ECCB area is fortunate in that it can learn from the experience of the implementation of deposit insurance schemes worldwide and try to avoid some of the mistakes that have occurred in the past. The paper suggests that the scheme be compulsory for deposit-taking institutions and offer limited explicit coverage. The deposit insurance scheme should be administered by the public sector and funded by its members. Issues for further consideration include whether all deposit-taking institutions should be covered under the scheme and whether premiums should be risk adjusted. We suggest further research with regard to design and implementation of a deposit insurance scheme that will suit the needs of the region.

REFERENCES

(1) The authors are economists at the Eastern Caribbean Central Bank. The views expressed in this paper are entirely those of the authors, and do not necessarily reflect policy positions of the ECCB or the countries it represents.

(2) This figure excludes school co-operative societies and friendly societies.


(5) These securities must mature in 15 years or less.

(6) See ECCB Agreement Act 1983, s.40(1), a–b.

(7) These fees should not be regarded as premiums as they are one-time fees levied to take care of shortfalls in the insurance fund.

(8) Wheelock, D. and Wilson, P. (1994) 'Can deposit insurance increase the risk of bank


**FURTHER READING**


