THE CHALLENGES OF THE YEAR 2000 AND BEYOND FOR CENTRAL BANKS

By

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I. INTRODUCTION

In just four months time, the year 2000 will roll in and the world will be witnessing the beginning of another millennium, the 21st century. Different organisations and professions have been organising seminars aimed at appraising their achievements or otherwise as well as their roles and relevance in the new millennium. The timing of this seminar is therefore appropriate and its theme "Central Banking in the Year 2000 and Beyond: Challenges for the Central Bank of Nigeria" is germane to stimulating discussions focused on the evolution and prospects of central banking as well as familiarising seminar participants not only with contemporary policy issues but also with challenges they may have to grapple with as central banking transits into the 21st century.

My task is to highlight the challenges which may confront central banks in the discharge of their inter-dependent responsibilities as they go into the next millennium and the 21st century rolls along. Section II provides a bird's eye-view of the evolution of central banks because as Professor Charles Goodhart puts it, "a deep understanding of history helps to obtain a good insight into future problems no matter in what guise they may emerge."[1] Sections III and VII examine the challenges likely to face central banks in sustaining monetary policy and price stability, the stability of the financial system, exchange rate stability, management of central banks operations and the often referred to 'millennium bug', taking cognizance of the fact that "the essence of Central Bank's thinking... is looking through time, through the medium-term into the long-term."[2] The paper is concluded in Section V.

II. EVOLUTION OF CENTRAL BANKS

Central banks have grown in number from 18 in 1900 to 23 in 1920, 80 in 1960 and 161 in 1990 and the number has continued to increase as more countries gained political independence. Throughout their history, central banks, especially the earlier established

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ones, performed different tasks at different periods and although their developments were not identical, yet in the words of Alexandre Lamfalusi, "in a long and broad historical perspective, central banking has always been in transition... just like most of the institutions in modern time."[3]

The earlier ones were established as special commercial banks with government charters, which made them the main bankers to their respective governments and were granted the sole privilege of issuing currency. In some countries such as Sweden, Norway, Finland, Denmark and the Netherlands, where monopoly rights were not necessary, the government chartered banks were effectively the only commercial banks in existence at the time of establishment. The reasons for establishing these banks included the provision of commercial banking services where there was none. The investment of the bank's capital in government bonds was the chief motivating factor for the governments, while the existence of state debt holders expected to deepen the market for such debt was a succour for the chartered banks. For those established immediately after the Napoleonic Wars, restoration of monetary stability in the wake of what in Denmark was aptly termed "Statsbankerot" (State bankruptcy) attendant to the excessive issue of government paper currency to meet war time expenditure, was the main motive.[4]

By 1913, a common standard role for central banks had evolved; and all the elements in Walter Bagehot's 1873 proposal that the central bank should not be concerned with short-term profit maximisation but should "attempt, in the long-term interests of the financial system as a whole, to prevent contagious panic and to maintain systematic stability,"[5] appeared to have been put into practice. The main objective of the central bank was to maintain the value of its currency through convertibility into gold. The main control instrument was variation in interest rates. The interest rates were made effective by discounting bills and increasingly by open market operations. It had withdrawn from business competition and rivalry with commercial banks to become the bankers' bank while the banks had accepted its leadership role. It had served as lender of last resort and, on occasions, engaged in rescue operations for financial institutions as in the Austria-Hungary stock market crash of 1873, the 1882 stock market crash in France and Portugal's banking crisis of 1876. Also, there were cases of central bank cooperation as evidenced in gold lending among themselves to help stabilize interest rates, and in the Banque de France discounting bills for the Bank of England as early as 1839.[6]

The main central bank functions now include issuing legal tender currency and safeguarding its value; promoting monetary or price stability; serving as banker to the government ad the banks; as well as ensuring the soundness of the financial system. In carrying out these interrelated tasks, central banks operating in an internationally integrated, innovative, highly competitive global environment, and in an extremely fast process of change, have acquired enhanced importance and status hardly envisaged by their founding fathers. The novelty does not lie only in the pace of change but also with the fact that change is occurring everywhere with no perceptible end in sight.

III. MACROECONOMIC CHALLENGES

III.1 Monetary Policy and Price Stability

As earlier noted, the first generation central banks established either to provide an additional source of fund for government or to assist in the restoration of monetary stability, while the investment of their capital in fixed-interest government stock provided them an incentive to seek price stability. Thus, very early in the history of central banking, inflation as a monetary phenomenon was appreciated and the role of central banks in the maintenance of price stability was recognized. Hence, the truth in the assertion by Alan Greenspan that the "guiding principle that runs throughout the history of central banking is that the fundamental strategic policy of a monetary authority should be a macro-economic price stability"[7] and that central banks should be seen as the guardians of price stability.

Monetary policy aimed at price stability has passed through a number of phases in line with the evolution of central banking. The goal was the maintenance of the value of the currency or price stability in terms of gold in the early days of central banking and in terms of goods in modern times. Price stability as the focus of monetary policy hardly mattered when money was tied to gold, there could be no inflation in such a system except on rate occasions of substantial new gold discoveries. With the demise of the gold standard, the insignificant status of monetary policy after the Great Depression, the rise of discretionary monetary policy to bring inflation under control, and the greater appreciation of the dangers of high and variable inflation, there emerged a consensus in the 1970s among academics, the public and central bankers that price stability should be "treasured and enshrined as the prime monetary policy priority."[8]

This largely accounted for the decision of one country after another that the Central Bank's monetary policy goal should be price stability and that active policy was needed to achieve that objective.[9] To this end, Germany and the United States adopted monetary targeting in 1974, Switzerland did so in 1975 while the United Kingdom and France among others, did so in 1976 and 1977 respectively. This still appears to be in vogue and is likely to be carried over into the 21st century.

However, financial innovation is now feared to be introducing elements of uncertainty either in the monetary authorities' decision-making process or in the transmission mechanism, i.e., the way in which a monetary policy decisions affects prices and the real economy. The potential influence of complicated devices such as swaps, interest rate futures or options, is still largely *terra incognito,* studies on which are a major challenge for central banks, and that challenge will be a carry-over to the 21st century. Also in the view of Yusushi Mieno, one time Governor of the Bank of Japan, a challenge to the strategy of money supply targeting is the incidence, since the 1980s of asset price bubbles along with general price instability. While monetary policy should not be aimed at asset price stability, "yet we cannot ignore asset prices, given that any large fluctuation can have a serious adverse impact on financial system... The question still remains as to how we should treat asset prices in formulating policy"[10]

Are these developments sufficiently overwhelming to doubt the "efficacy" of a money supply based monetary policy? If so, should it be discarded or used in diminishing scale along with the discretionary strategy which it sought to replace? What happens to its known advantages which included providing enough advance warning of inflation dangers for timely action to be taken? Tracking the ultimate goal of price stability alone raises the danger that the central bank will not be able to anticipate trouble. By clearly defining the stance of monetary policy, money supply targeting helps the formation of expectations by market participants, relieves central banks of pressure from government quarters and helps to avoid the temptation of judgemental adjustments to monetary policy. Most importantly, a money supply target which is relatively well understood by the people at large, gives a clear signal to market participants as to the range of price adjustments and wage settlements that is compatible with a stability oriented monetary policy. Beyond this range, they run the risk of pricing themselves out of the market.

If money supply targeting were discarded, all the listed advantages would be lost to monetary policy formulation unless a more efficient mechanism is found to replace it. This is a future challenge to central bankers to be properly addressed in the course of unfolding developments. If it means a return to the judgemental type of monetary policy which preceded it, the conduct of monetary policy could become more difficult. It would mean carrying out a judgemental type of monetary policy in a new set of circumstances, in which central banks are entrusted with the explicit mandate to secure price stability and have no excuse for failure, because as "independent" central banks, they do not have to comply with the whims of their political masters. In the event of failure, they stand to once again face the wrath of the "Free Banking School" that do not believe in the need for central banks. Again, the challenge here in essence is, to the extent that the setting of a monetary supply target no longer provides an unambiguous indicator of the resolve of central banks to pursue a stability-oriented monetary policy, in which case, central banks will have to find other ways and means of conveying their messages to the markets. This will necessarily entail better and more detailed information on the economic analyses forming the basis for monetary policy. And these they will need to do in a way to maintain and enhance their credibility.

Monetary policy does not operate in a vacuum. In particular, what happens in the fiscal area does matter a lot. A fiscal 'stance not supportive of monetary policy is likely to trigger inflationary pressures. Hence, the need for an appropriate policy mix. An optimum policy mix in which monetary and fiscal policy stances as complementary and mutually supportive requires two correct decisions not simply one. This is a major challenge to central banks now and may continue to be so for quite some time into the 21st century.

A democratic society has an inflationary bias. This carries with it a challenge for central banks to ensure the general public's understanding of price stability in all its ramifications and gain their firm support for it. Jacques de Larosiere puts this very aptly when he stated that "it is the public at large and the markets that will need to support the continuation of anti-inflationary policies. This is all the more important to communicating clearly the right message. Say what you do, and do what you say."[11] This is a challenge to the credibility of central banks. On this, I will end this section with the words of Karl-Otto Pohl, a one time President of the German Bundesbank: "In Germany, we have always been in a very happy situation because the people like the Bundesbank much more than the Government or any other institution in their country." He proceeded to add that this was confirmed by Jacques Delors who also observed that "not all Germans believe in God but all Germans believe in the Bundesbank."[12] This state of affairs is not reached overnight. It is the result of persistently consistent and successful execution of monetary policy aimed at price stability which in turn made the Bundesbank credible and helped build and sustain a low inflation consistency over the years. Very few central banks can boast of this and it remains one of the challenges they will carry over to the 21st century.

IV. STABILITY OF THE FINANCIAL AND PAYMENT SYSTEM

Because the financial system is the nerve centre of the economic system, its stability is regarded as a traditional task of central banks. Indeed, more often than not, they were entrusted with this at the same time as that of issuing bank notes. Even today, in cases where the macro-prudential function has been carved out to other agencies, central banks are still viewed as responsible, or at least co-responsible for ensuring the stability of the financial and payment system as a whole.

The history of financial institutions shows an often unsatisfactory mixture: innovation in response to the needs of growing economies, but many disruptive episodes of financial instability. Failures and fraud in their financial system have led governments in both developed and developing countries to intervene extensively either in support of failing institutions or to channel cheap credit to sectors perceived to be at the forefront of development.[13] However, the developed countries while intervening did not forget to put emphasis on measures designed to safeguard the stability of the financial system and did not hesitate to embark on deregulation and liberalization as from the 1970s when the economic and financial fundamentals pointed in that direction. The developing countries on the other hand delayed deregulation because they failed to realize early enough that even a well designed control regime tends to lose effectiveness if maintained for too long and the potential for mistakes grows as economies become more complex. Neither did they pay due attention to regulatory and prudential matters. In the event, financial institutions weakened, at times when large fiscal and balance of payments deficits, inappropriate interest and exchange rate regimes, high external debt, inflationary pressures, fundamentally inefficient domestic industries, poor accounting standards and poor legal framework, prevailed. All these, combined, led to distress in the system[14] and the incidence of failed financial institutions which came close to that of the 1930s. Countries affected included both developed and developing countries such as Argentina, Chile, Bolivia, Egypt, Ghana, Kenya, Guinea, Nigeria, the USA, Germany, Greece, Turkey and Norway.[15] Added to these were the 1997 Asia crisis engulfing Thailand, Indonesia and Korea as well as the distress in the Japanese financial system. These crises were rooted mainly, in the fragility of the financial sector stemming in part, from the weaknesses in the corporate, financial and government sectors which, given the increasing rapidity with which international capital movements often change course, made these economies increasingly vulnerable to changes in market sentiment, deteriorating external situation and contagion.[16]

The important lesson to be drawn from these developments is that under any financial system, mistakes can occur. Market-based financial systems, like public ones, are subject to fraud and instability. The goal then, is not perfection but a system which mobilizes resources efficiently, minimizes allocative mistakes, curbs fraud, and stops instability from turning into a crisis. Restructuring a financial system with this in mind, is both a challenge and an opportunity, but should not be a once for all affair.[17] It has to be carried out in the context of unfolding developments with the objective of having stability at all time.

Another challenge is that as at now the prevailing and prospective financial environment will not make the achievement of this objective an easy task for a number of reasons. First, is the globalization of financial markets which embraces international financial integration and the blurring of demarcation lines between financial products as well as between different segments of the financial industry and the progress in information and communication technology with the capability of transmitting with lightning speed "impulses originating in one country or in one market segment to other countries or the rest of the industry."[18] Second, financial asset prices have been displaying a high degree of volatility unconnected with underlying fundamentals and cannot be attributed to public policy blunders but which may be accentuated by globalization. Third, is the increased opaqueness of financial markets which made more difficult the assessment of creditworthiness of individual market participants on the basis of publicly available information. This non-transparency blurs information flows and impedes the smooth functioning of free markets. It has also become exceedingly difficult, if not impossible to evaluate the interconnection between market segments either geographically or functionally.

Fourth, central banks now face the dual challenge of the relative decline in the role of banks in the financial system and the fading specificity of banking itself. About three or four decades ago, commercial banks were the privileged market interlocutors of central banks and by safeguarding the stability of the banking system, central banks were reasonably sure that they were protecting, indirectly but effectively, the stability of the financial system as a whole. Now, this can be true to only diminishing extent. In the event, regulators are under pressure to regularly reassess which institutions and functions they should regulate and supervise and; bank regulation which thus far has evolved as an accretion of ad hoc responses to particular crisis cannot satisfactorily meet the growing flux of structural changes we are now witnessing. Fifth, there has been a spectacular surge in the volume and average size of financial transactions, resulting in an unprecedented rise in the volume of payments, intra-day settlement exposures, and with them liquidity and credit risk have reached a new dimension putting a premium on the efficiency and soundness of clearing and settlement arrangements.

Despite the instability inherent in the present globalised financial system and what it portends for the future, it does contain built-in shock absorbers. Financial innovation has put at the disposal of market participants hedging devices which offers protection against asset price instability. Globalization itself has increased the depth and liquidity of markets, while securitization led to a wider distribution of risks throughout the system, and market efficiency has increased. The point however, is that the event of a local financial crisis could easily and rapidly assume global dimensions. Central bankers cannot but be conscious of this at all time now and right into the 21st century.

The message which all these send to central bank are threefold. First, monetary policy should be directed in the medium-term towards the attainment of price stability. Lack of credible commitment to that objective could aggravate the risk of market reaction and of systematic instability. This may not eliminate all misalignments nor significantly reduce short-term volatility, but it would at least eliminate monetary policy as a contributory factor. Second, central banks would have to do everything in their power to make the financial system more transparent through more complete and comparable disclosure by all market participants. The cooperation between regulatory agencies with the accounting profession and market participants will need to be fostered. Statistical information on market links will need to be developed and perfected, even if this turns out to be a tedious and costly exercise. Third, central banks should help enhance the safety of domestic and international payment, settlement and clearing systems, which are the transmission mechanisms that could amplify crisis manifestations and turn a local or sectoral crisis into a genuinely global one. This leads me to the integrity and efficiency of the payments system.

The link between economic activity and money occurs via the clearing and settlement process and has a fundamental role in the execution of central bank monetary policy. Accordingly, central banks will continue to have a special concern about clearing and payments systems for broad reasons of policy. Also, the central bank's concern for stability of the financial system cannot be divorced from its interest in the integrity of the payments systems, i.e. the ability of the payments system to function safely even during times of financial distress. Coupled with its integrity is the efficiency of the payments system, because proper handling of payments is a resource consuming activity, deserving attention on purely economic grounds.

The functioning of the payments systems also has implications for the efficiency of the underlying markets. Some of these markets, such as those for certain financial instruments, are worldwide. The location of the nucleus of activity for these markets depends partly on the integrity and efficiency of the clearing and settlement process in different countries. Thus, central banks that want their countries to play a role as financial centres must be concerned about the efficient operation of their payment systems. Finally, in an interdependent world where goods, services and financial instruments are traded routinely across national borders, there is need for cross-border settlement arrangements. Such cross-border systems may operate in many countries and time zones, thus presenting central banks with a variety of challenges that can only be met through the development and execution of appropriate payment policies.[19]

V. EXCHANGE RATE STABILITY

As in other areas, exchange rate regime operated by central banks has evolved in a cyclical fashion. In a reaction to the rigidity of the gold standard, which prevailed until 1914, floating rates were seen as the panacea to the economic problems of the inter-war period. With "ensuring wave of exchange rate depreciation and beggar-my-neighbour policies generally, the consensus returned to exchange rate parity. In the 1960s floating rates again became fashionable..."[20] and were generalized in 1973. The generalized floating was itself a reaction to the Bretton Woods par value system which provided for easily monitorable exchange rate adjustments. Since then, some countries have gone back to exchange rate system fixed either to a major currency, the SDR basket or no rate within a monetary block with the block floating against non-block currencies as in the European Union. Whichever exchange rate regime a country decides upon, the challenge it poses to the central bank is that of stability.

Exchange rate stability should not be construed as rigid or unchanging exchange rates despite changing underlying fundamentals. Reasonable exchange rate stability is essential for a variety of reasons, including a better functioning of the foreign exchange markets devoid of the erratic and wild fluctuations of the type that characterized most of recent years. Excessive rate movements also tend to lead to market abuses which in turn can lead to losses in exchange markets even among the soundest of banks, thus aggravating strains in the banking system. The inflationary consequences of excessive rate swings are also worth bearing in mind.

The exchange rate regime adopted by a country is that of government decision, no doubt with central bank input. The management of exchange rates however, is more often than not, that of central banks. The pursuit of price stability through monetary policy can be helped or hindered by exchange rate developments. It is apt to note here that the orthodox monetary view that freely floating exchange rates would secure for individual countries freedom to pursue their domestic policy objectives, particularly, that of price stability, has not been vindicated in practice. First, according to Lamfalusi, the assumption that monetary policy directed towards domestic monetary stability will also stabilize the exchange rate is not always valid. While diverging stances of monetary and exchange rate policies have a destabilizing effect on exchange rates, stability-oriented monetary policy by itself may not carry with it exchange rate stability. Fiscal policy stance is also an important and crucial element, either because of its possible influence on inflation expectations, or by creating current account imbalances and therefore a shift in financial portfolios. It may be true that monetary policy will always be able to offset the undesirable impact of fiscal policy on exchange rates, but this will be at a cost, i.e. by resorting to changes in interest rates which could not be justified in terms of domestic balance. Secondly, exchange rate changes, whatever their origin, will affect domestic prices and will therefore, have an impact on price expectations.[21]

The practical conclusion is two-fold. First, in their quest for price stability central banks cannot disregard exchange rate developments. Neither are they able to influence exchange rates, in the case of persistent fiscal imbalances, solely through monetary policy means, or through exchange market interventions without running the risk of deviating from the pursuit of their domestic policy objective. Here again, the need for an appropriate policy mix is important. However, the problem is compounded by the fact that in a world of rigid fiscal policies, international agreement on a correct configuration of policy mixes is even harder to come by than agreement on the appropriate monetary policy. The problem will not end with the 20th century. central banks, to the extent that the largely prevailing system persists, will continue to live with it in the next century.

Second, is the international dimension with its implications for the use of money supply targeting. On the level of definition, there is the question of whether or not to include in the targeted M, such items as non-residents' holdings of assets denominated in domestic currency or residents' holdings of foreign currency assets. There is also the related question of how to deal with assets held in offshore centres. More fundamentally, the combinations of changes in interest rates differentials with shifting exchange rate expectations may induce portfolio movements which may significantly destabilize the behaviour of the targeted M. Finally, the increasingly large scale use of derivatives certainly has an impact on treasury and liquidity management of corporations and is therefore likely to have an impact on the behaviour of M. Again, these will not just fade away with the 20th century. A major 21st century challenge to central banks is the possible emergence of currency blocks as witnessed by the process of monetary integration in the European Union resulting in the establishment of the European Central Bank and the launching of Euro-currency for the participating eleven countries of the Union. With the replacement of the national currencies with the Euro by or before 2002, there will be no exchange rates in the complete EMU. Should the European experience be replicated in other regions of the world, a not impossible situation given the economic and trade arrangements gathering momentum as did the European Economic Community, may not be ruled out and the 21st century may witness a world of big monetary blocks. The question is, what will be the status of central banks in such monetary blocks?

VI. OPERATIONAL CHALLENGES

Historically, central banks were faced with various challenges in the course of performing their functions. A number of these challenges are still there and will be carried over to the 21st century. Some of the challenges have been noted earlier in the paper. The management of a central bank does pose some challenges, a few of which have also been alluded to.

First are the challenges of monetary policy formulation and implementation. The core objective of a central bank is the maintenance of price stability. Its success in achieving this hinges largely on the extent to which it is insulated in its operational decision-making from transient political pressures motivated by government's proneness to politically expedient policies. Although the paper is not on autonomy, it is apt to say that it would be inconsistent to give the central bank a task and deny it the freedom of action to perform the task, a situation that prevailed until they recently in most countries. Even when granted the freedom of action, there is still the challenge of ensuring compatibility of fiscal stance with that of price stability-oriented monetary policy. In the event a central bank should develop and sustain the art of marrying flexibility with firmness and as O' Grady Walsh puts it, "a central bank should know when to bend with the wind and when to stand ground... recognize the legitimacy of government's primary concern with growth, employment, and perhaps resource transfers, but be insistent on the perils of 'short-termism,' and on the long-run benefits of monetary stability."[22]

To put it starkly, whatever the formal independence of a central bank is, what matters is ensuring a good co-ordination of policies that will result in an appropriate policy mix for the attainment or maintenance of price stability. The challenge here is what a central bank should bring to that mix, and this is emphasis on the crucial importance of stability in the specific sense of price stability and in the more general sense of the orderly performance and continuity of financial markets.

As regards, its autonomy. a central bank has to work hard on daily basis to earn it. Apart from legal provisions. the degree of real freedom which a central bank enjoys will be affected by changes in government, key personalities in the central bank and in government, the integrity of its top officials, the quality and credibility of its reports and analyses of issues, and its success in building and sustaining a low-inflation political constituency over time. Also important are how the central bank has used its multifaceted relations with the banks and other financial institutions by developing harmonious relationship based on co-operation and persuasion rather than coercion rooted in tbe exercise of statutory powers, good relations with the print and electronic media. Finally, its relations with foreign central banks, correspondent banks, and international monetary and financial institutions, like the IMF and the World Bank.

There is also the human challenge. The success of a central bank depends ultimately on the quality and motivation of its staff. In recent years according to Walsh, "innovation in commercial banking in terms of engineering and marketing of new financial products has relegated the role of central banker to that of observer, learned, and perhaps worried supervisor; the central banker is rarely at the forefront of developments — normally a step or two behind."[23] This is a serious but legitimate observation that needs to be properly addressed as central banks enter the 21st century, by regularly upgrading staff skills and expertise, and by seeking to have central bank managers identify with the banking and the commercial world and not to be over-identified as part of a bureaucracy that appears to be at odds with the private sector ethos of the banks.

Regarding the management of external reserves, where this is the responsibility of the central bank, liquidity and security should continue to have priority. The guiding rules here relate *inter alia* to the choice of currencies, the adherence to target ranges for the proportionate mix of currencies, the choice of investments, and observance of limits on certain instruments and maturities.

Finally, is the challenge of cultivating a capacity for regular critical appraisal of what the central bank does, why and how well they are done, with a view to improving on its effectiveness and appreciating proposals for change from other quarters. Such reviews could be in-house to start with, but should be carried out by a panel of experts constituted by the Central Bank itself as the IMF and the World Bank are already doing.

VII. THE MILLENNIUM BUG

For quite some time past, there have been warnings of problems that are likely to arise on January 1, 2000 when computers around the world may erroneously read the new year in the standard two-digit year field as 1900. This could cause substantial disruption in financial transactions including transformation of payments schedules. Initially, the millennium bug (Y2K) was widely viewed as an information technology problem. Now it is recogmized as a management and business problem, solution to which involves evaluating and managing risk, perception and behaviour. The key to the problem is understanding its nature, and developing contingency plans to work around it.

Many countries did not start early enough to address the Y2K problem. It was reported that as at April, 1999, more than 30 countries were yet to address it; "93% of computer companies and governments could not determine when their systems would fail; 81% of all commercial software was not Y2K compliant."[24] However, the general opinion as at that time was that the banking and financial systems, both nationally and internationally, were in good shape.

Reasons attributed for the late start in addressing the problem included inadequate level of awareness; the adoption of a high-strategy of "wait and see" as the most cost-effective strategy; resource constraint which made some countries accord low priority to Y2k problem, and the level of computerization — countries that do not rely heavily on large mainframe computer system initially ignored the spectre of the Y2K.[25]

The time left for action is now short, but this should not rule out actions that can ameliorate the envisaged problems. To that end, central banks should, first of all set their houses in order by examining their own level of readiness for the year 2000. They should identify their mission-critical systems, fix those they have time to fix and develop plans to work around those they do not have time to fix. If they have not, they should formulate plans to ensure year 2000 compliance by the banking and other financial institutions, monitor achievements and problems with a view to assisting tbem, and instilling confidence in tbe public. In anticipation of the Y2K problem, people could worry about credit which might result in a 'flight to quality' as investors and depositors move their assets to safer havens.

Y2K is a systematic problem and should, as such, be addressed properly to avoid a systematic crisis. Thus, the situation in high-impact countries with the strongest links to the international financial system should be given priority attention by their central banks. Contingency plans to maintain critical functions should be put in place. On the whole the watchword should be as Yardeni puts it, "prepare for the worst, hope for the best."[26]

VIII. CONCLUSION

The paper, apart from a short historical background, dealt in varying depths, with the challenges currently facing central banks and most of which will no doubt be carried over into the 21st century in the context of price stability, the stability and soundness of the financial and payment system, exchange rate stability and the management of central banks, operations. The Y2K problem as relates to the banking and financial system though critical, is peripheral and as the IMF report indicates, is reasonably being addressed.

If the criterion of success of a business or an organization is that it should reproduce and multiply over time, the finding is that central banks have been successful. Their number has multiplied and continues to rise as more countries attain political independence. However, when considered in the context of the impact of their actions and policies and taking cognizance of their mandates, the result is mixed. While some of them have succeeded to rein in inflation and achieved a high degree of stability in the financial system and exchange rates for most of the time, episodes of endemic inflation characterized the economies of the others. Exchange rates are far from being stable in many countries, while the financial system continues to witness distress and failures of financial institutions.

Thus far, current opinion attributes more of the blame for the failure to government interference. With the wind of change blowing across central banks resulting in their autonomy, central banks will, in the course of the 21st century, be put on the spot. Should they fail, despite being given both the mandate and the operational autonomy, they will once again, have to contend with a renewal of exotic proposals such as that of free banking which envisages the removal of central banking altogether.

Added to this is the spectre of regional economic and monetary integration and the consequences for central banking. As pointed out in the text, the replication of the European experience which produced the European Central Bank and the European currency (Euro), may reverse the tidal wave of central bank autonomy. On this crucial issue, Karl-Otto Pohl, President of the German Bundesbank, observed that "by definition, it would mean the end of the independence of the Bundesbank as a monetary policy agent.

The President of the Bundesbank would just be a member of a council and have one vote among others"[27] This is food for thought when considering challenges facing central banks in the next millennium.

Financial innovation, rapid developments in information systems and communications technology, and globalization which have all, singly or jointly, played a role in determining the challenges confronting central banks, will gather even greater momentum in the years ahead. Since no central bank can afford to be left behind, they just have to learn to live with the evolving situation and take due cognizance of it in their decision-making process. Problems have to be anticipated and contingency measures formulated to ensure instantaneous action in the even of crisis which may provide little or no advance warnings.

Without repeating what has been said in the text, it is apt to say that the challenges to central banks in the years to come will continue to centre mainly on their primary functions as succinctly put by John Major, former British Prime Minister, as the "defence of the currency, defence of the nation's credit, and defence of **their** own position in the political firmament."[28] In addition, central banks should continue to put emphasis on: modern analysis to explain old thoughts or ideas, the relevance of expectations and importance of credibility to the success of policy, and the crucial importance of co-operation with their counterparts abroad, especially in times of crises.

More importantly, central banks should always bear in mind what Paul Volcker, once described as the lasting qualities which are the hallmarks of central banking"

> "Continuity and all that implies for experience and nurturing a long view; competence and all that implies for a high degree of professionalism and careful deliberations and communication; and integrity and all that implies for accountability, transparency and simple honesty."[29]

These are the qualities that determined central banks 'current influence in the political process and public respect for them, their credibility and success in achieving stability at home and constructive co-operation with their counterparts abroad.

Finally, by virtue of its objectives, central banks have become a unique place for their staff. They are unique to the extent to which practical and theoretical knowledge come together, interact and get blended. This has to continue to ensure that the most rigorous intellectual standards, not only in relation to the theoretical underpinning of issues, but also in relation to the expanding professional knowledge are maintained in the practical execution of policies. It is this duality that has been most attractive and stimulating to staff, which in the last analysis, makes a central bank.

NOTES

1. *Forest Copie, Charles Goodhart, Nobert Schnadt, The Development of Central Banking, paper presented at the conference to mark the 30th Anniversary of the Bank of England, in Conference Proceedings (Mimeograph).*
2. *Jacques de Larosiere, The Philosophy of Central Banking: A Panel Discussion in Ibid p. 352.*
3. *Alexandre Lamfalusi, Central Banking in Transition: 1994 Per Jacobson Lecture, June 8, 1994.*
4. *Forest Copie, Charles Goodhart, Nobert Schnadt, The Development of Central Banking, op cit.*
5. *Ibid, p. 4.*
6. *Ibid, p. 10.*
7. *Alan Greenspan, The future of Central Banking in Ibid, p. 242.*
8. *Paul Volcker, in Ibid.*
9. *Alan Greenspan, in Ibid.*
10. *Yasushi Mieno, Conference Proceedings in Ibid, p. 250*
11. *Jacques de Larosiere, The Philosophy of Central Banking: Panel Discussion in Ibid., pp. 350–351.*
12. *Karl-Otto Pohl, The Philosophy of Central Banking Panel Discussion, in Ibid., pp. 358–359.*
13. *Word Development Report 1989, The World Bank, Oxford University Press, New York, 1989, p. 9.*
14. *Robert H. Heller, Prudential Supervision and Monetary Policy in The Evolving Role of Central Banks, adapted by Patrick Downes and Reza Vaez-Zadeh, International Monetary Fund, Washington DC, 1991 pp. 195–196.*
15. *See World Bank Development Report 1989 for comprehensive list and analysis.*
16. *IMF Survey, Vol. 28, No. 2 Summary 25, 1999, p. 17.*
17. *World Development Report 1989, p. 53.*
18. *Alexandre Lamfalusi, Central Banking in Transition, op. cit.*
19. *Bruce J. Summers, Clearing and Payment System: The Central Banks Role, in the Evalving Role of Central Banks, op. cit., pp. 30–40.*
20. *Alfred Hayes, Emerging Arrangements in International Payments Public and Private, The 1975 Per Jacobson Lecture, Washington, D.C., August 31, 1975.*
21. *Ibid.*
22. *T. O. Gray Walshe, Managing the Central Bank: Goals, Strategies, and Techniques, in the Evolving Role of Central Banks, op. cit. p. 113.*
23. *Ibid., p. 104.*
24. *IMF Survey, April 26, 1999, p. 119.*
25. *Ibid.*
26. *Edward Yardeni, quoted in IMF Survey, April 26, 1999, p. 120.*
27. *Karl-Otto Pohl, The Future of Central Banking Panel Discussion in Development of Central Banking op. cit. p. 359.*
28. *Remarks by Prime Minister John, in Development of Central Banking, op. cit. pp. 360–362.*
29. *Paul Volcker: The Philosophy of Central Banking, op. cit. p. 344.*