Rakesh Mohan: Avian influenza pandemic – preparedness within the financial sector

Introductory remarks by Dr Rakesh Mohan, Deputy Governor of the Reserve Bank of India, at the IMF seminar on “Preparedness within the Financial Sector for an Avian Influenza Pandemic”, Mumbai, 24 July 2006.

The assistance of Rajiv Ranjan and Rajeev Jain is gratefully acknowledged.

* * *

I would like to welcome all of you to India for the IMF Seminar on "Preparedness within the Financial Sector for an Avian Influenza Pandemic", which has been a source of concern not only for health experts but also for policy makers in Governments and Central Banks alike. It is important to undertake activities that are preventive in nature, so that the probability of an undesirable event is minimised. The Fund’s efforts to bring countries that are vulnerable to the pandemic on a common platform by organising such seminars are highly commendable. It is worth noting that if some thing does not happen, people generally remain unaware about how much effort went into making sure that it does not happen. As I understand, the focus of these IMF seminars is on business continuity planning for a human influenza pandemic and issues relevant to central banks, supervisory agencies and regulated financial institutions. At this stage, the avian flu is not a current problem for India. However, it always has the potential of becoming a severe pandemic, however small the probability may be, in case preventive measures are not taken in time. It is, therefore, important to raise awareness among the concerned authorities. It is toward this end that the IMF is sensitising different countries towards preparing for any potential outbreak of avian flu.

At the outset, let me make emphasize that, as I understand it, the major part of the subject matter discussed in this seminar is not specific to avian flu but it could apply to all types of major disruptions in the conduct of normal business. The important point to note is that though we may believe that the possibility of occurrence of a widespread avian flu pandemic is low, the issues that are discussed in such seminars are still useful from the point of view of preparedness for any unforeseen eventualities that have the potential of disrupting the normal functioning of the financial system. Such disruptions require immediate interventions from the Government and the regulatory authorities. Thus, the scope of business continuity plans that the central banks and other institutions develop go beyond the avian flu. Preparedness with effective business continuity plans is desirable not only for dealing with the issue of avian flu but would also be helpful in case of other contingencies of any nature.

In these introductory remarks, I will try to be brief since the programme has a panel of experts dwelling on several aspects of avian flu. I, therefore, thought that the best thing that I can do today is to provide a brief overview on the issue mainly from the perspective of the financial system. While highlighting the gravity of the avian flu pandemic and challenges for the financial system, I would also dwell briefly on our preparedness for the avian flu epidemic.

I. Gravity of the avian flu pandemic

The outbreak of any contagious pandemic on a large scale has always had significant economic impact on the affected economies. The outbreak of SARS in 2003 proved that even a disease with a relatively small health impact can have adverse economic implications. The severity of a pandemic can be seen from a historical perspective. According to the World Health Organisation (WHO), the Spanish Flu of 1918 was the deadliest in which one-fourth of world’s population got sick and 40 million people died (2 per cent of global population) (WHO, 2003).

In the early 20th century, science was sufficiently sophisticated to anticipate that influenza, which had twice reached pandemic proportions in the late 19th century, would recur, but was largely powerless to blunt the devastating impact of the 1918 (H1N1) pandemic. Since then, scientific progress has contributed significantly in making possible defences against the disease in terms of increased knowledge of influenza viruses that has enabled new capacity to design and manufacture vaccines and antiviral drugs to forestall infections. Yet the world is vulnerable to the pandemic, perhaps even more than in 1918, when the pace and frequency of global travel was considerably lower than it is today. Earlier experience shows that once the pandemic starts spreading, it will do so very fast giving no time to prepare. Vaccines, antiviral and antibiotics would be in short supply and are likely to be unequally distributed. Widespread illness may result in sudden and potentially significant shortages of personnel. The effect would be relatively prolonged when compared to other natural disasters.

Until recently the highly pathogenic avian influenza H5N1 virus had been concentrated in East Asia, particularly in Vietnam, Thailand, Indonesia and China. However, in the last 6 to 9 months, the virus has gone global, spreading to over 40 more countries (Brahambhatt, 2006). As on July 14, 2006, the cumulative number of confirmed human cases of death on account of avian influenza (H5N1) stood at 132 in 10 countries as reported in WHO Fact Sheet. According to WHO, "If the human-to-human transmission is not contained quickly the modern means of transportation will rapidly seed a pandemic". Experts estimate that the next pandemic may cause more than 1 billion cases and up to 7.4 million deaths. During the current H5N1 outbreaks more than 150 million birds have been destroyed or died and the direct economic costs to affected countries amount to US$ 8-12 billion (WHO, 2006).

According to an estimate by the Asian Development Bank, the economic impact of SARS was around US$ 18 billion in East Asia, which comes to around 0.6 per cent of their total GDP (ADB, 2003). The recent outbreak of the avian influenza (H5N1), popularly known as avian flu, which started in late 2003, has raised concerns about a new global pandemic as experts fear that the H5N1 virus strain will mutate just enough to allow it to pass easily from person to person, potentially causing a catastrophic pandemic as humans lack immunity to it. According to experts, the avian flu is far more lethal than SARS. While SARS had a mortality rate of around 15 percent, avian flu, which has now spread from Asia to Europe, can kill up to a third of the infected people.

There is substantial uncertainty about the potential economic impact of a pandemic of any given severity. It is estimated that a modest pandemic lasting over one year might cause a loss as high as 3 per cent of Asian GDP and 0.5 per cent of world GDP. This is presently equivalent to about US$ 150-200 billion in GDP (WHO, 2006). In addition to high morbidity and mortality, the pandemic may cause massive social, political and economic disruption. According to an estimate, the cost to the poultry industry has already exceeded US$ 10 billion across Southeast Asia (United Nations, 2006). Financial costs of a human pandemic are impossible to predict. The World Bank estimates that a severe avian flu pandemic among humans could cost the global economy about 3.1 per cent of world gross domestic product, around US$ 1.25 trillion on a world GDP of US$ 40 trillion (World Bank, 2006).

II. Avian flu as a major public issue

Given the severity of the possible threat of pandemic, the avian flu is regarded by some observers as a major public issue and is considered by them to be one of the major risks to global growth prospects and the financial system. Therefore, the need to prepare for a pandemic is becoming an important focus for governments and international organisations, including the International Monetary Fund (IMF). At the Beijing International Conference, US$ 1.9 billion was pledged to support efforts at all levels to help fight avian flu and prepare for a possible human flu pandemic (IMF, 2006). The World Bank, the World Health Organisation, the Food and Agriculture Organisation, and the World Organisation for Animal Health are taking the lead in preparing a global coordinated response strategy on the possibility of an avian flu crisis, and helping members improve surveillance and control capacity and to develop national action plans that focus primarily on human and animal health. We all know that the Fund can play an important role in encouraging its members to prepare for a possible pandemic, in facilitating cooperation across the membership, and advising members on appropriate macroeconomic policies and helping to support them with balance of payments financing where this is needed. The Fund has already indicated that its near-term efforts will focus primarily on helping members prepare their economic and financial systems to limit the possible disruptions that may be caused by a pandemic.

In the recently held G-8 Summit at St. Petersburg (July 16-17, 2006), understanding the gravity of the possible pandemic, the member countries felt that disease can be dramatically more contagious as the world becomes ever more interconnected. Airlines now carry an estimated 1.6 billion passengers every year. Trade, commerce and financial markets are increasingly interrelated. The SARS outbreak of 2003 vividly demonstrated how much the world has changed in terms of its vulnerability to economic and social disruptions when disease outbreaks occur. Though it is difficult to predict the timing and severity of the pandemic but, for the first time in history, the world has the advantage of advance warning about a potential pandemic. This advantage must be fully exploited to enhance global preparedness. Similarly, recognising the risk of avian flu, the Bank for International Settlements (BIS) in its Annual Report 2005-06 (BIS, 2006) reveals that business continuity planning has received additional priority in view of the need for increased preparations for a possible avian flu pandemic, which would primarily affect human resource availability (including dependencies on external services). The Financial Stability Forum, which promotes international financial stability, in its 15th Meeting at Sydney (March 17, 2006) warned, "…the uncertainties relating to the timing, severity and impact of a pandemic are substantial, financial authorities need to consider well in advance the potential impacts of a pandemic on financial systems, to make business continuity plans for their own institutions, to review business continuity plans elsewhere in the financial sector and to improve channels for communication and coordination, both within and across borders" (Financial Stability Forum, 2006).

III. Challenges for the financial system

Though the possible impact of avian flu would be covered in detail in this seminar, I would like to briefly touch upon the risks and challenges which a severe pandemic could pose to a domestic as well as the global financial system. Some of these challenges are expected to be similar to the strains on the financial system that might be expected from any slowdown in growth irrespective of the source. Others will be particular to the conditions of a flu pandemic, such as uncertain labour supply, increased operational risks, potentially unstable infrastructure and restrictions on travel, *etc.* International attention has focused on the need for all countries to be better prepared, in order to reduce the potential death, illness, social and economic consequences of a pandemic. A worrisome scenario cannot be ruled out if absenteeism and increased uncertainty about operational risks harm the functioning of financial markets or financial institutions. Broadly speaking, financial system effects might be on account of reduced capacity of markets and institutions due to absenteeism.

These challenges have necessitated preparedness within the financial sector so as to minimise the adversities associated with a potential pandemic, the severity of which is still uncertain. A severe pandemic will not only put substantial pressure on the fiscal balance of Governments, due to increased spending on health, public safety, social welfare, and subsidies to businesses and lost revenues, but it will also pose challenges for the monetary authorities. For financing the increased need for social spending, financial markets are expected to be thin at best and recourse to central bank borrowing may be inevitable for most of countries.

It would be prudent to assume that a severe pandemic may lead to a surge in demand for liquidity and low risk assets. Such risk aversion on the part of economic agents would lead to at least temporary declines in asset prices and widening of credit spreads, for both corporations and emerging markets. Although these effects are likely to be temporary, asset price declines could put the balance sheets of some financial institutions under stress and they may face challenges in meeting regulatory norms. Banking stability may not be an issue of immediate concern because deterioration in asset quality is not expected to appear quickly and we can perceive them as second order impact. According to the IMF, a severe pandemic may also lead to a significant but temporary reduction in net capital flows to emerging markets. Such a pandemic can disrupt market operations as well in the case of a breakdown in the trading infrastructure. In short, we can contemplate the likely challenges for central banks in the context of (i) financing the larger borrowing needs of the respective governments, (ii) inflation, (iii) liquidity management, (iv) payment and settlement systems, *etc.* keeping in mind that disruptions in one jurisdiction could have spill-over effect in other jurisdictions.

If required, central banks may have to prepare themselves to act as lenders of last resort. In many countries, in order to restore macroeconomic stability and fiscal sustainability, central banks may have to adjust monetary policy to prevent a sustained increase in inflation, withdrawing fiscal stimulus, particularly in countries facing debt sustainability issues, as well as ensuring external viability, including through a rebuilding of international reserves and greater exchange rate flexibility. Similarly, a financial institution’s risk assessment and management plans may have to be expanded to cover the possibility of widespread economic disruptions and their impact on loan and other asset performance.

In addition to the direct impact of avian flu on agricultural output, the indirect effects could severely disrupt domestic economies, as tourism falls, trade and transport restrictions arise, consumer spending drops, and business confidence and investment deteriorate. As a result, the retail sector and services exports could be severely affected and balance of payment pressures might arise in tourism-dependent economies.

Many institutions in various countries have instituted business continuity plans (BCPs) in order to face major disruption to the operations and services of their financial system. BCPs are intended to mitigate this risk, by ensuring the continuity of critical financial infrastructure and functions of individual institutions. In some quarters, apprehensions are being expressed that such BCP using a single back up may not prove to be much effective in the event of severe pandemic. Although BCPs could be desirable for every country irrespective of its size to deal with contingencies like avian pandemic but its microstructure may differ from country to country.

Another important implication of the avian flu pandemic could be for the insurance sector. As emphasized by the Financial Stability Forum, a flood of claims might strain the capacity of the global insurance and reinsurance sectors. Insurers are exposed to the effects of a pandemic through a number of business lines, including such risks as business interruption, health, disability, medical malpractice, workers' compensation, and life insurance. Estimates of the impact of a global flu pandemic on the insurance industry vary widely. Standard and Poor's recently suggested a mild pandemic might produce $15-20 billion in worldwide losses, while losses from a more severe event might total up to $200 billion (Standard and Poor's, 2005).

IV. Possible preparedness on avian flu

Given these possible risks and challenges, it is felt that there should be clear command and communication structure for crisis management in case this pandemic becomes severe. Critical functions and priority would have to be identified in advance - market operations, reserve management, clearing and settlement and banking supervision. There should be preparedness for high absentee rate and back-up arrangements for key staff. The need for providing computers and internet connections to staff at home would arise in order to facilitate "work from home" arrangements. Problem of insufficient public network bandwidth may arise. There is a need to finalise the bare minimum banking services that must continue operations in a worst-case scenario (Phone, internet banking, ATM, payment related service, access to safe deposit boxes). The payment system and currency issue are important from the point of view of the central banks.

Countries, which are most vulnerable to Avian flu pandemic, may like to initiate their own business continuity plans by ensuring the continuity of critical financial infrastructure and functions of individual institutions. Many countries have already started strengthening such efforts. Preparedness is highest among countries like Singapore and Hong Kong that experienced the SARS outbreak. Similarly, adequate preparation is unavoidable for countries that have recently dealt with avian flu outbreaks and have large, complex financial systems. They are already testing their Business Continuity Plans (BCP) and creating awareness among their staff. Several Committees / task forces have been set up to look into issues like business, legal, human resources, payment system, currency management, communications, health/hygiene and security. Several large global financial institutions also have advanced preparations, as do providers of payment services, mainly by establishing alternative sites, and recovery task forces. They have a senior crisis management team in place to plan for the contingency. In fact, the IMF has rightly emphasized that financial institutions must have BCPs that do not focus only on a single, short-lived event (IMF, 2006). In fact, I would say that actions at country level may not be sufficient and regional and global coordination, therefore, will remain essential as well. Coordination efforts already made by various regions and regional organisations of the world, as well as the support provided by the UN system are praiseworthy.

During the crisis itself, authorities will have a number of potential roles to play. One major job for authorities is acting as a focal point for communication in a variety of areas like (i) receiving information from market participants on the extent of disruption and on the business continuity measures taken that may affect other participants, (ii) acting as a point of liaison between financial markets and the wider government emergency response, and perhaps also with utilities and telecommunications providers, (iii) providing information to the market and to the public on the functioning of markets and systems (both financial and non-financial). Cross-border communication, in fact, becomes even more important than before because of the global nature of the event.

Because of this central role, it would be better if communication methods are robust enough to take care of potential disruption to staffing and physical infrastructure and are equipped with multiple communication channels available. If there are disruptions to trading and communications infrastructure, *ad hoc* solutions may be needed in order to allow smooth process of necessary transactions and maintaining critical operations.

In this context, I would like to cite some instances in our country where the central bank, other regulatory authorities and government have jointly handled the contingencies successfully. For instance, there was the beginning of a panic run on a bank in 2003 led by a baseless rumour at one particular place of the country. The Reserve Bank immediately clarified that the Bank had sufficient liquidity and arranged to provide adequate cash to that Bank to meet the demands of its customers and helped that bank to keep its branches open at the affected places even on holidays to restore customer confidence. If such measure were not taken in time, then there could have been a possible spill-over to other banks as other bank customers could have accessed the ATM of this affected bank which could have created further panic.

Other interesting illustrations of ensuring business continuity in the Indian context are perhaps the stock market episodes of May 17, 2004 and more recently on May 18, 2006. On May 17, 2004, in the wake of change of Government, stock markets in India witnessed a record fall in price, which triggered the index-based circuit breaker twice during the day. The index-based circuit breaker triggered a stoppage of trades in the stock exchange for around two hours. Seeing the possibility of a spill-over in money, G-Sec and forex markets, the Reserve Bank intervened on that day and two separate press releases were issued by the Reserve Bank indicating, (a) constitution of an internal Task Force under the Executive Director, Financial Market Committee to monitor the developments in financial markets, and (b) assuring availability of rupee and forex liquidity. Thus, it was communicated that the Reserve Bank was keeping in touch with major settlement banks and the stock exchanges to ensure that payment obligations on the exchanges were met and gave assurance of selling dollars through agent banks in order to augment supply or intervene directly to meet any demand - supply imbalances. Subsequent to the flashing of the press release, the market witnessed a quick recovery and, in fact, no Reserve Bank liquidity or forex facilities announced had to be used. In view of developments in stock exchanges after May 18, 2006 crash, the Reserve Bank was in constant touch with major settlement banks and both the major stock exchanges to ensure that the payment obligations on the exchanges were met smoothly.

Similarly, in the aftermath of the train bomb blasts in Mumbai on July 11, 2006, the Reserve Bank made all arrangements to ensure uninterrupted continuation of normal services rendered by it and also the critical payment systems. Subsequent to the experience of the potential run on a bank in 2003, the Reserve Bank has developed standard instructions for dealing with any such eventuality that could affect business continuity and normalcy in operations. Hence it is important to act fast whenever some potential threat is identified. These episodes clearly point out that there is need for proper coordination among all regulators so that in the event of contingency, proper coordinated response could be initiated. Therefore, I would stress again that the scope of business continuity plans for central banks goes beyond the avian flu.

V. Avian flu: the Indian case

If seen in the Indian perspective, the first case of bird flu in Maharashtra was announced on February 18, 2006 as a sample of an affected poultry farm from Navapur was tested positive for highly pathogenic H5N1 viral strain. First case of H5N1 infection in birds was reported in India in February 2006. Initially, the virus infected 52 poultry farms in northern part of Maharashtra and such reports put authorities in other states on high alert as such a contagious disease could be source of concern for the Indian economy in general and poultry industry in particular. India is the fifth largest producer of eggs and the livestock and poultry sector is one of the fastest growing sectors in India. It may be noted that outbreak of Avian Flu was Navapur and Uchhal in Maharastra was a localised one, which has been contained effectively. The major poultry exporting States are located at a considerable distance from Navapur. According to Ministry of Agriculture, the export of poultry/poultry products from these States is absolutely safe as the samples tested are negative (Government of India, 2006a).

According to the Ministry of Agriculture, there has been no case of avian flu reported since April 18 of this year. Prudence, however, demands that we should take all possible precautions in this regard and be prepared to face any eventuality of any nature. According to Minister of Agriculture, Consumer Affairs, Food and Public Distribution, "though the poultry industry had suffered heavily because of the outbreak of bird flu this year, India would be in a position to declare the country free from this disease very soon (Government of India, 2006b)." To avoid any large scale avian flu pandemic, the Indian authorities have already announced various protective measures. Action Plan has been prepared for the guidance of the Animal Husbandry Departments of the State Governments. This Action Plan for the State Governments consists of three parts. Part I gives the Action Plan in case of any suspicion of occurrence of avian flu at any place. Part II describes the Action Plan in the unlikely event of the outbreak of the disease being confirmed by laboratory tests. Part III provides advice to persons who may be required to handle highly pathogenic avian influenza (HPAI) affected poultry. Recently, the Indian Council of Agricultural Research (ICAR) has developed an indigenous vaccine for poultry against the deadly disease. Since the disease has got recurring possibility, the development of the indigenous vaccine can go a long way in tackling bird flu effectively.

As part of measures to protect domestic poultry industry from any loss on account of avian flu, in April 2006, the Reserve Bank announced guidelines for relief measures by commercial banks and urban commercial banks. Keeping in view the loss of income that occurred due to culling of birds as well as steep fall in the demand for poultry products and their prices on account of outbreak of Avian Influenza (bird flu) in some areas of the country, the Reserve Bank has asked banks to consider extending certain facilities to poultry units financed by them. Some of these measures are: (i) conversion of principal and interest due on working capital loans, which have fallen due for payment on/ after the onset of bird flu, *i.e*., February 1, 2006 and remaining unpaid, into term loans. The converted loans may be recovered in installments based on projected future inflows over a period up to three years with an initial moratorium of up to one year, (ii) rescheduling of remaining portion of term loan with a moratorium period up to one year depending upon the cash flow generating capacity of the unit, (iii)eligibility of borrowers for fresh need based finance, and (iv) extension of relief measures to all accounts of poultry industry, which were classified as standard accounts as on March 31, 2006.

In addition, the Government has granted a one-time interest subvention of 4 per cent per annum on the outstanding principal amount as on March 31, 2006 (not including any part of the principal amount that has become overdue) to all poultry units availing loans from banks. To resolve any policy differences among the regulators and to discuss issues relating to any overlaps, co-ordination and co-operation, a High Level Coordination Committee on Financial and Capital Markets (HLCCFCM) consisting of Governor of the Reserve Bank, Chairman, SEBI and Chairman, IRDA along with the Secretary, Department of Economic Affairs, Government of India, is already in place. The Reserve Bank of India has also constituted an Inter-Departmental Committee to look into the details of the impact of avian flu on the financial sector of the economy.

VI. Concluding observations

At the end, I would like to lay stress on the need for proper coordination between the health authorities, business entrepreneurs and the financial policy makers. As the IMF is making efforts in sensitising the issue of avian flu among the central banks for better preparedness, the regulatory authorities within the countries also need to sensitise the regulated entities in order to ensure better preparedness with business continuity plans for the possible avian flu pandemic. I reiterate that these continuity plans are desirable for all types of contingencies for the financial sector. Pandemic drill exercises may also be helpful in assessing such overall preparedness. Further, proper coordination is necessary to arrive at a realistic estimate of the potential risk of the pandemic and align various measures within the financial sector with the alert system of health authorities. This will in turn help in not only chalking out effective preparedness plans but also to ensure effective communication in implementation process. Similarly, there is a need to strengthen joint and strategic efforts, without which it would be a challenging task for country authorities to prevent and eliminate the health, security, trade and financial threats emanating from avian influenza and other animal diseases at global level. This will require adequate resources, particularly in developing countries and regions where challenges may be large and resources insufficient. Therefore, our collaboration not only in terms of financial support but also information sharing and exchange of ideas on various emerging issues relating to economic and financial system has become necessary. In this context, such series of Seminars being organised on the initiative of the IMF on the Avian Flu pandemic can prove to be quite helpful in understanding these issues and exchanging the ideas for apt preparedness which is the ultimate goal for all us present here. I wish all the success for the Seminar.

References

Asian Development Bank (2003), *Asian Development Outlook 2003*, Hong Kong, China: Oxford University Press.

Bank for International Settlements (2006), 76th *Annual Report, 1 April 2005 to 31 March 2006*, Basel, June 26, 2006.

Brahmbhatt, Milan (2006), "Economic Impacts of Avian Influenza Propagation", Speech at the First International Conference on Avian Influenza in Humans,

Institut Pasteur – Paris, France, June 29, 2006 (available at the www.worldbank.org).

Financial Stability Forum (2006), "Press Release on Financial Stability Forum Meets in Sydney", March 17, 2006.

Government of India (2006a), "Weekly Report on Notifiable Avian Influenza (H5 & H7) week ending July 9, 2006", Ministry of Agriculture.

Government of India (2006b), "Press Release on States Urged to help Poultry Farmers", Press Information Bureau, Ministry of Agriculture, July 19, 2006.

International Monetary Fund (2006), "The Global Economic and Financial Impact of an Avian Flu Pandemic and the Role of the IMF", February 2006.

Standard and Poor's (2005), "Determining the Insurance Ramifications of a Possible Pandemic," *Ratings Direct*, November.

World Bank (2006), "Avian Flu: The Economic Cost", June 29, 2006 (available at www.worldbank.org).

World Health Organisation (2003), "Influenza", Fact Sheet No. 211, March 2003 (available at www.who.int/en/).

World Health Organisation (2006), "Regional Influenza Pandemic Preparedness Plan (2006-2008)", Regional Office for South East Asia, New Delhi.

United Nations (2006), *Key Economic Developments and Prospects in the Asia-Pacific region 2006*, Economic and Social Commission for Asia and the Pacific, United Nations, January 2006.