First, let me thank the IMF for the invitation. At first, when I was asked to speak on this panel, I was not sure why the Fund is organizing a high-level seminar in Asia on Early Warning Systems, as interest on the topic seems to have faded completely with the recovery of the Asian economies from the crisis in early 2000's. Then, it becomes clear that the resurgence of interest on EWS, now called EWE or Early Warning Exercises, is very much the mandate of the G20 that requires the IMF and the FSB to lead the conduct of such exercises in response to the current crisis. Given the severity of the current crisis, I think this initiative is important and needs to be supported.

For this afternoon, I want to make three observations on how the new Early Warning Exercises can be made most useful to help sustain global growth and maintain financial stability, especially in light of the lessons learned from the current and past crises. My observations will be on: (1) the nature of future crises; (2) their implications for the role and the conduct of EWE going forward; and (3) some suggestions on what should constitute the important components of the EWE process.

First, on the nature of future crises. One criticism we often hear about EWS in the past is that the system is often good in replicating the last crisis but is less useful in anticipating future crises. This point I believe has been echoed also in today’s seminar. A key reason for this is the way the EWS models have been calibrated to fit the explanation for the last crisis, and hence, becomes less useful for anticipating future crises when circumstances or the risk factor change. Similarly, lessons learned from the previous crisis tend to over-prepare policymakers for a repeat of a similar crisis, thereby leaving them vulnerable to the new cause of the next crisis. Therefore, for EWE to be useful, it must have the ability to anticipate the nature of future crises with certain accuracy. This, of course, is going to be a demanding task, but it is this quality that the EWE process needs to have. This is because without certain degree of accuracy, it will be difficult to persuade policymakers to collectively become engaged in addressing certain risk and vulnerabilities.

In my view, the task could be easier achieved if the focus of EWE is narrowed down to the really important systemic issues i.e., the issues that have high-global impact but are beyond the capabilities of market and individual economies to monitor and make assessment. For example, instead of trying to spot vulnerabilities in all the possible key risk, in all markets, and in all economies, EWE should narrow its focus instead on the systemically-important issues, especially the known-unknowns. This include the robustness of the key global financial markets and infrastructure, risk relating to the systemically-important large economies and the operations of the internationally-important financial institutions. Such focus will make the whole EWE process more valuable and complements well with the surveillance that are done elsewhere at the country or regional level.

With regards to the nature of future crises, a few realities have emerged from the current global financial turmoil.

First, it is clear from recent experience that nobody is above crisis. Crisis can happen in any economy regardless of whether it is large or small, developed or emerging, with or without a sophisticated financial system, and regardless of whether the country adopts a fixed or flexible exchange rate system. And once happens, the impact is large because of the
globalized nature of markets that drives the spillover or contagion. For emerging markets, this means the risk of future crises are wide-ranging and can be both externally and internally induced. And as we have seen in the current crisis, the impact from an externally-induced crisis through contagion can be as large as an internally-induced or home-grown crisis.

Second, given the tendency that lessons from past crises will encourage policymakers to adopt more cautious policy and reform, this change in the policy conduct will help reduce the likelihood of an internally-induced crisis based on policy weakness, domestic misalignment, and moral hazard. Instead, the nature of future crises will relate more to the externally-induced factors.

Third, features of the externally-induced crises will mirror a fundamental shift from crises based on macro-misalignment in the individual economies to crises based on failures of key markets, system, and institutions, that are systemically important and have a global-wide impact because of the underlying interconnectedness. The issues of trust, robustness of markets and financial infrastructure, counterparty-risk, information gap, as well as, liquidity will become important possible triggers of the future market disruptions. In addition, geopolitical events or trade tension can also lead to disruptions in global liquidity and trigger a global-wide impact.

The main message here is that, going forward, future crises will be different. They will relate less to misalignment in the individual economies because of better policy and regulation, but will relate more to the resiliency of the global system, market and institutions, as well as the ability of the policymakers to prevent or address the vulnerabilities beforehand.

Forth, for emerging markets, the most threatening externally-induced crises going forward will be those that relate to the concentration of global liquidity, either too much or too little, in the form of large, persistent, and volatile capital flows that overwhelm the capacities of individual countries to manage and adjust to. And the most worrying aspect of this is that the trigger would lie outside the controls of emerging market’s policymakers since the flows would be the results of market conditions and policy prescription elsewhere.

Let me now turn to my second observation on the implications that the changing nature of future crises can have for the conduct of EWE going forward. On this, I have four points to make.

First, in view of the changing nature of future crises, it is therefore important that the thrust of the EWE is mindful of this possibility. In my view, the focus of EWE should expand beyond macro-misalignments based on historical relationships to include assessing the robustness and the resiliency of the systemically-important markets, system, and institutions. This means the key objective of EWE will not be to forecast future crises per se, but to identify vulnerabilities in the most important areas in advance, especially those risks that are not covered by market data or by the surveillance process elsewhere.

Second, for EWE to be effective and comprehensive, it should be done at two levels to cover both the global dimension and the country-specific dimension of risk. The global dimension must be the responsibilities of the IMF and the FSB given their comparative advantage as international organization. And as I already noted, EWE by the IMF and the FSB should focus on monitoring the development of risk in the key global financial markets, risk linked to activities of the internationally-important financial institutions, and the economic conditions and policies of the systemically-important economies. These are the areas of risk that have global-wide implications but are not being monitored sufficiently relative to their importance.

Third, the focus of the EWE at the country-level also needs to expand beyond detecting and avoiding local macro-misalignments, and to include assessment of the resiliency and robustness of the domestic economy and financial system to withstand large external shocks. The key point here is that, even with good policies, crisis can happen to an economy if the externally-induced factors overwhelm the abilities and the robustness of the domestic economy to cope with.
And *forth*, the value of early warning is that warning leads to the needed actions being taken in advance. This means the EWE process should serve to facilitate actions to deal with the important risk and issues by the relevant parties. To serve this end, credibility and effectiveness of the EWE depends on appropriate degree of transparency of the structural models and its appropriateness to the context, whether national or markets, as much as its track record.

In closing, let me summarize my points in the form of suggestions for the current efforts on the EWE.

*First*, the focus of EWE should expand beyond detecting misalignments to include assessing vulnerabilities and robustness of the global markets, system, and institutions.

*Second*, EWE should be a two-level process. The global level process focuses on the systemically important markets, institutions, and economies. At this level, the FSB can play a role in ensuring consistent implementation of regulatory standards, as well as undertaking stress-testing to check the robustness and the resilience of the key markets, institutions, and system. Likewise, EWE at the country-level, which can be a part of the normal article IV cycle, should have an additional focus on stress-testing the resiliency of the economy and domestic financial system to large external shocks. The shock scenario can be a common set of assumptions provided by the IMF for all countries and draws on EWE findings at the global level. This will provide a good connection between the perceived global systemic risk and the abilities of the individual economies to handle them.

*Lastly*, EWE must be part of a global policy process, in that information of EWE must be used and if needed leads to timely policy action. On this note, increased transparency of the process, as well as its recommendations, can be a way of allowing market to have a view and force the issue.

I hope this has been useful. Let me stop here and again I want to thank the IMF for the invitation. Thank you.