



# **Alternative Exchange Rate Regimes**

**Michael Mussa**

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## Foreword

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The exchange rate policy has been a subject of intensive debate in Egypt for years. While this debate is both healthy and beneficial, it has become exceedingly limited and politicized in recent years, focusing on such issues as whether Egypt should devalue the pound or not and the question of accepting IMF conditionality. Perhaps as a result of such limiting factors, very little in-depth discussion has taken place publicly regarding an appropriate exchange rate regime for Egypt that draws on the experience of emerging markets. Michael Mussa's presentation is a clear break away from this tradition.

By means of a systematic and thought-provoking tour of the evolution of exchange rate regimes since WWII, Mr. Mussa invites us to consider exchange rate regimes in industrial countries as well as developing and transitional countries. Broadening the debate to consider international experiences, he argues that a country's search for an appropriate exchange rate system is a serious undertaking and universal answers simply do not exist. He maintains, however, that while relatively large economies with open capital accounts and healthy banking systems are generally better off adopting more flexible exchange rate regimes, smaller and less integrated economies in the world might find a fixed regime more appropriate.

Egypt's situation was not discussed directly during the presentation. However, various members of the audience raised pointed questions that provoked interesting, although somewhat guarded, responses from Mr. Mussa. Topics such as adopting a more flexible exchange rate regime and the timing for changing the basket in Egypt were discussed. In all, this most recent addition to the *Distinguished Lecture Series* offers a lot of good food for thought. Both the presentation and the discussion address issues on the pulse of the debate now taking place in Egypt and I have no doubt that readers will find them both enjoyable and very informative.

Ahmed Galal  
Executive Director, ECES  
June 2000

## تقديم

تعد سياسة سعر الصرف من أهم القضايا الاقتصادية التي أثارت ومازالت تثير جدلاً واسعاً في الأوساط الاقتصادية بمصر. وعلى الرغم من أن هذا النقاش يعد ظاهرة صحية ومفيدة، إلا أنه يؤخذ عليه التركيز على بعد واحد فقط لسياسة سعر الصرف ألا وهو مناقشة جدوى تخفيض قيمة الجنية المصري، بالإضافة إلى تحليل موقف صندوق النقد الدولي من هذا التخفيض. وقد ترتب على ما تقدم إغفال مناقشة جوهر القضية وهو ما يتعلق بنظام سعر الصرف الأكثر ملائمة للاقتصاد المصري في ضوء الدروس المستفادة من تجارب الدول الأخرى. وتأتي محاضرة مايكل موسى لتكسر هذه القاعدة.

وبأسلوب يتميز بالشمول والتسلسل المنطقي، يستهل الأستاذ مايكل موسى محاضراته بتحليل تطور نظم سعر الصرف منذ الحرب العالمية الثانية في الدول المتقدمة والنامية والناشئة. ثم ينتقل المحاضر، استناداً إلى هذه التجربة الدولية، إلى القول بأنه من الصعب بشكل عام الحديث عن نظام أمثل لسعر الصرف، دون الأخذ في الاعتبار خصائص كل دولة ومرحلة تقدمها الاقتصادي. ومع ذلك يخلص المحاضر إلى أن الخبرة الدولية تفيد أنه من الأفضل للدول الكبيرة نسبياً، والتي قطعت شوطاً كبيراً في تحرير ميزان معاملاتها الرأسمالية، وتمتيز في نفس الوقت بقوة نظامها المصرفي، أن تتبع نظم صرف تتسم بالمرونة. أما بالنسبة للاقتصادات التي تتميز بصغر حجمها نسبياً، وضعف درجة اندماجها في السوق العالمية، فمن الأفضل لها إنتهاج نظم صرف ثابتة.

وعلى الرغم من أن المحاضرة لم تتعرض بشكل مباشر لنظام سعر الصرف المطبق في مصر، إلا أن الحاضرين قد أثاروا العديد من الأسئلة الهامة التي أجاب عليها الأستاذ مايكل موسى بأسلوب ذكي وأن كان متحفظاً بعض الشيء. وأهم هذه الأسئلة من، وجهة نظري، هو السؤال المتعلق بإمكانية تطبيق سعر صرف أكثر مرونة في مصر، وكذلك التوقيت المناسب لتغيير سلة العملات المستخدمة في تحديد سعر الصرف.

واستناداً إلى ما تقدم، يطرح هذا الإصدار الجديد من سلسلة المحاضرات المتميزة التي يصدرها المركز، مادة ثرية للتفكير والمناقشة. فقد تصدت المحاضرة وكذلك المناقشات التي أعقبها، لموضوع هام بالنسبة للاقتصاد المصري في المرحلة الراهنة. وليس لدى شك في أن القارئ سوف يستمتع بالإطلاع على هذه الورقة.

د. أحمد جلال

المدير التنفيذي

المركز المصري للدراسات الاقتصادية

يونيو ٢٠٠٠

ABOUT THE SPEAKER

**Michael Mussa**

Economic Counsellor and Director of the Department of Research  
International Monetary Fund

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Dr. Michael Mussa is the Economic Counsellor and Director of the Research Department at the International Monetary Fund. Holding this position since September of 1991, he is responsible for advising the management of the Fund and the Fund's Executive Board on broad issues of economic policy, as well as providing analysis of on-going developments in the world economy. He supervises the activities of the Research Department, including preparation of the World Economic Outlook, the reports on the international capital markets, and a variety of other materials related to the Fund's economic surveillance activities.

Before joining the staff of the Fund, Mr. Mussa was a long time member of the faculty of the School of Business in the University of Chicago, the same school where he earned his PhD. He was a faculty member of the Department of Economics at the University of Rochester from 1971 to 1976. During this period he also served as a visiting faculty member at the graduate center of the City University of New York, the London School of Economics, and the Graduate Institute of Economic Studies in Geneva, Switzerland. By appointment of President Reagan, Mr. Mussa also served as a member of the U.S. Council of Economic Advisors from August 1986 to September 1988.

Mr. Mussa's main areas of research are international economics, macroeconomics, monetary economics, and municipal finance.

## PART I

### ALTERNATIVE EXCHANGE RATE REGIMES

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#### 1. Introduction

The 1990s have seen a number of important national economic crises related in varying degrees to the issue of exchange regimes. At the start of the decade in 1992/1993, we had a major crisis in the European Monetary System (EMS). There were a series of more serious crises in the summers of 1992 and 1993 in which many exchange rates needed to be adjusted due to considerable economic and financial turbulence. These crises were followed in late 1994 with the devaluation of the Mexican peso and subsequent development of the so-called “Tequila Crisis” that particularly affected Latin America. 1997 began with the devaluation of Czech koruna in May and then extended to the devaluation of the Thai baht in July. Increasing degrees of turbulence involving Indonesia, Korea, Malaysia, and so forth, then brought about the Asian economic and financial crisis in 1997 and 1998. As the world economy began to recover from that, we had the Russian and LTCM (Long Term Capital Management) crises in the summer and fall of 1998, and finally, the crisis of the Brazilian real and its devaluation in January 1999. Because there have been an alarming number of economic and financial crises during the past decade in which the exchange rate and the exchange rate regime played a prominent role, the Fund’s supervisory Ministerial Committee and its Executive Board wanted to conduct a study of exchange rate regimes in light of recent developments.

What I want to do this morning is to go through the main points of this paper<sup>1</sup>, focusing first on the main issue of exchange rate regimes for the industrial countries. Even if you are more interested in emerging markets or developing countries, there are two reasons why it is important to look at the industrial countries. First is the fact that Industrial countries’ currencies are the primary currencies of the International Monetary System. If your business is located in the United States, you have the privilege of doing your economic and financial business in terms of

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<sup>1</sup> The basis for this lecture is a paper that has just been released by the International Monetary Fund: Michael Mussa et al., *Exchange Rate Regimes in an Increasingly Integrated World Economy*, April 2000.

your domestic currency. However, if your business is located in Egypt or any other emerging market country and you do any international business at all, it is not predominantly in terms of your domestic currency, but rather in the world's major international currencies. Thus, how these currencies operate and how exchange rates between them behave is a factor of very substantial importance. Businesses in developing countries cannot afford loose knowledge of their country's exchange rate policy the way exclusively domestic-based US businesses can. Secondly, there are indeed some important lessons from the experiences of industrial countries that are relevant beyond their immediate reign of operation. The industrial countries differ in important characteristics from most developing and transitional economies, but increasingly those differences are being eroded. Hence, things we have learned from industrial countries remain relevant to a broad range of countries.

Following the discussion of industrial countries, I want to turn more specifically to the situation of developing countries, particularly those emerging market countries that have recently increased integration into the world's trade and capital account system. There are a number of points that I will raise in respect to exchange rate regimes for developing and emerging market countries.

Before beginning with the industrial countries, however, I wish to emphasize two central points that are at the base of this discussion. First, let us consider the *exchange rate regime*. The exchange rate regime consists of a longer-term commitment of a country's national policies to have a certain behavior of its exchange rate vis-à-vis the currencies of other countries. The exchange rate regime is not something that is changed every day, every week, every month, or every year. An exchange rate regime is something that persists over a more extended period of time. It is essential to understand that an exchange rate regime is not something that can be changed all the time because the only way that business can do business is if they are certain of the policy regime in which they are operating. Therefore, it just does not pay to say, "Well, the floating regime is really what we need today. Tomorrow we will peg the rate," and then a few months down the line, say, "Well, the pegged rate is not really convenient for us, we will float the rate." An exchange rate regime that changes all the time is not a regime at all and does not

provide a stable basis for private individuals and business to do what they need to do in order to make the economic system function.

The second general point is that the exchange rate regime is not something that exists in isolation. The exchange rate regime is an important part – but definitely a *part* – of the country's broader economic policy regime. In particular, there is a close and necessarily intimate relationship between a country's exchange rate regime and its monetary policy regime. For a country that has a pegged exchange rate, the exchange rate exerts a very substantial constraint on how domestic monetary policy can be conducted. Indeed, as I will discuss later, for countries that are highly open to international capital mobility and trade, the adoption of a pegged exchange rate regime is virtually synonymous with surrendering essentially any independence in the conduct of national monetary policy.

Monetary policy, however, is not the only factor that relates to exchange rate regimes. A country's policy regime with respect to openness, international capital movements, the involvement in foreign financial institutions and its banking system, and a whole host of other issues are also intimately tied up with the nature of its exchange rate regime. The same is true for its international trading regime. We don't worry too much about the exchange rate regime between Mars and Earth because there is not a great deal of trade or capital movement between Mars and Earth and accordingly, the exchange rate regime does not really matter. However, when there is a substantial amount of trade between different countries, say as in the case between Egypt and the European Union, then the nature of Egypt's exchange rate regime – whether it's pegged to the dollar or pegged to the euro, or pegged to a basket containing the euro and the dollar – is an issue that does matter. The nature of the trade regime as well as that of the financial market regime are issues of importance and relevance to exchange rates. With that introduction, let us now discuss exchange rate regimes for the industrial countries.



## 2. Exchange Rate Regimes for the Industrial Countries

Let me begin with a word or two about history. As World War II was winding down, the major Allied powers met in Bretton Woods, New Hampshire to attempt to restructure the international monetary regime that would prevail in the post-war era. What they structured was the so-called Bretton Woods system, which envisioned a system of pegged-but-adjustable exchange rates among the world's currencies, with the US dollar as the center of that system. Essentially everyone else in the world pegged their exchange rates to the US dollar, while the US dollar maintained a peg to gold. That system of pegged-but-adjustable exchange rates broke down in the early 1970s and it is important to review the key reason why.

Essentially, the Bretton Woods system failed because of the divergence between the monetary policy interests and objectives of the United States and those of Europe and Japan. In the 1960s and early 1970s the US Federal Reserve was running a more expansionary monetary policy than was comfortable for Europe and Japan. That led to large-scale capital outflows and to greater inflationary pressures than the Europeans felt was desirable. The incapacity of rationalizing this difference, either by having the Europeans surrender monetary independence to the United States and accept the degree of inflation created by the United States, or having the United States accept the discipline which Europe wished to have imposed on the United States to have a somewhat tighter monetary policy made the pegged rate system established under Bretton Woods no longer viable. Since that time, we have had floating exchange rates among the world's major currencies - most importantly, the US dollar, the Deutsche mark, and the Japanese yen.

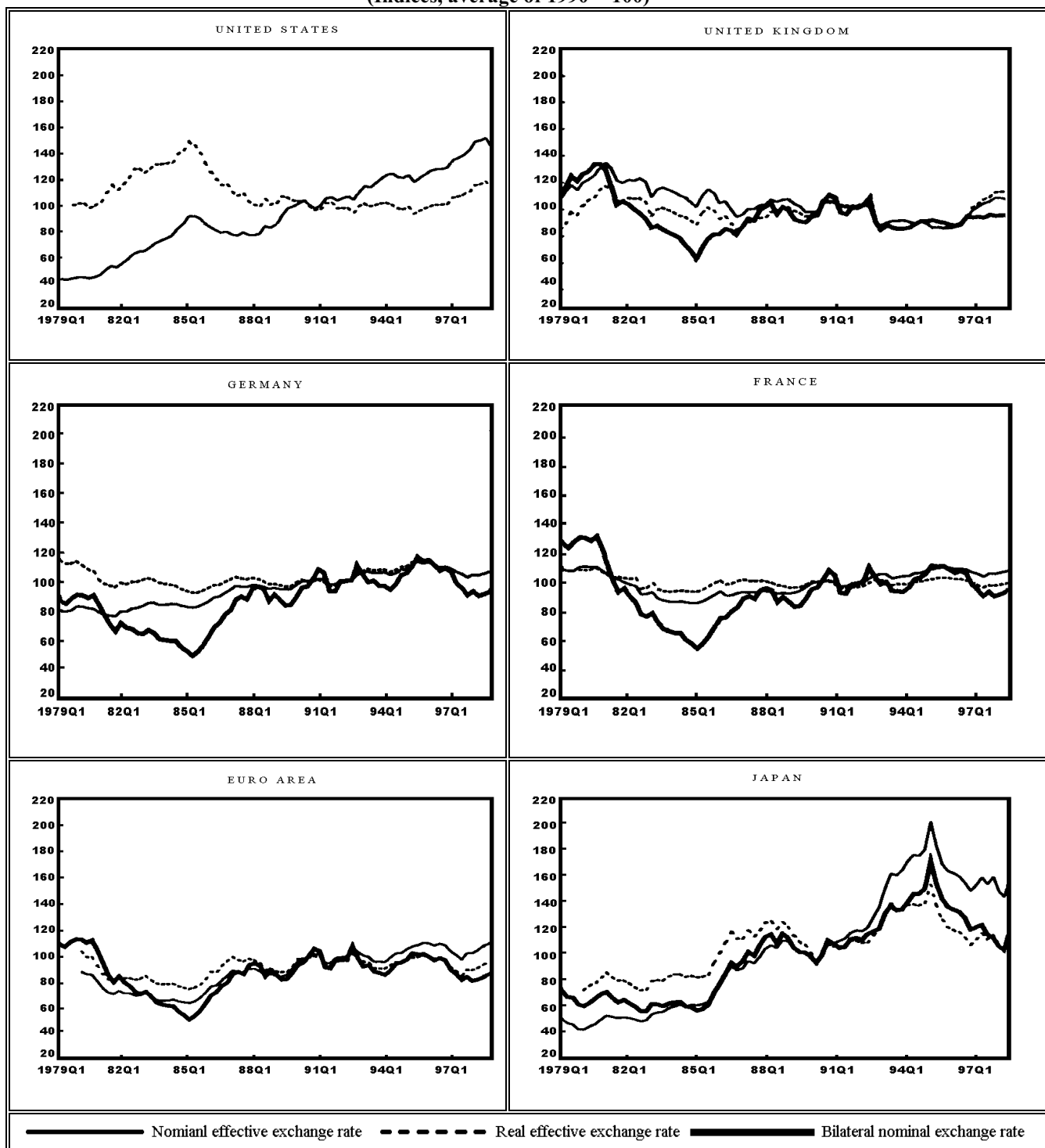
I want to highlight the fact that this resulting floating exchange rate system among the major currencies made it possible for different key national monetary authorities to pursue independent monetary policies. Absent a commitment to peg the exchange rate, the Federal Reserve pursued its monetary policy. At present, the United States' economy is performing very strongly and the Federal Reserve has moved progressively over the last nine months to tighten US monetary policy. One of the consequences of the monetary policy tightening in the United States has been a strong appreciation of the US dollar to an exchange rate where the euro is now worth only \$.95

versus the dollar. During that same period of time, particularly last year, economic growth in the Euro area was comparatively weak. The European Central Bank, pursuing its independent monetary policy, eased monetary conditions in Europe – a factor that contributed to the depreciation of the euro vis-à-vis the US dollar.

Again, because the exchange rate is floating for the euro and the dollar, both countries' capacity to accommodate to different economic conditions has been consistent with an exchange rate regime in which the exchange rate floats. In contrast, if the exchange rate were pegged between the euro and the dollar, then there would have been an important conflict between monetary policy in Europe and in the United States. Either the US would have needed to tighten less to accommodate to the sluggish growth in Europe, or the Europeans would have needed to have a much tighter monetary policy to accommodate to the rise of inflationary pressures in the United States. The existence of a floating exchange rate between the major currencies means that monetary policies in the different regions can pursue their independent objectives and can take account of independence in the economic developments in those regions. This is the key reason why we have had and continue to have floating exchange rates between the major currencies.

How much have exchange rates floated? Well, let us evaluate the movement of exchange rates among industrial countries beginning in 1979 and extending through the middle of 1999 (see Chart 1). Looking at the charts provided, the nominal effective exchange rate is a weighted average of the exchange rate versus other countries. The real effective exchange rate takes into account differentials in movements in national price levels, and the bilateral nominal exchange rates, in this case, are measured against the US dollar. Therefore, in the case of the US dollar, there is no bilateral exchange rate – it is fixed at unity. For the others, however, the heavy line shows the fluctuation against the US dollar. The charts illustrate the exchange rate between the US dollar and the other major currencies, which actually tend to fluctuate a good deal.

Chart 1. Selected Industrial Economies: Bilateral and Effective Exchange Rates, 1979/1-1998/4  
(Indices, average of 1990 = 100)



Sources: IMF, *International Financial Statistics*, Effective Exchange Rates Facility; the WEFA Group.

To understand how much a good deal is, let us turn our attention to the supplementary table (see Table 1). In the first column we calculated the average monthly variability of the exchange rate between the various currencies listed here and the US dollar. Statistically, it is the standard deviation of the logarithmic change in the exchange rate from one month to the next. This data is based on monthly average data, which is not necessarily ideal for all statistical purposes, but we chose it because price levels are not measured on an end of the month basis, but really on a monthly average basis. What is interesting in this table is that the European currencies – the Belgian franc, the French franc, the Deutsche mark, the Italian lira – all have a standard deviation of monthly changes a little bit under 3 percent per month, or between 2.5 percent and 3 percent per month. This rate holds true on average for the entire period of exchange rate floating since 1973. Whether we divide the period into two equal halves, thirds (which is what I have shown here), or equal fourths, the standard deviation or average percentage change tends to stay just a little bit under 3 percent per month. Thus, one month to the next, the exchange rate bounces up and down more or less unpredictably a little bit less than 3 percent. This has been the constant feature of exchange rates between the US dollar and European currencies, and also between the US dollar and the Japanese yen, throughout the entire period of exchange rate floating.

It is important that we have a general grasp of the economic trends during this time period. The 1970s were a period of high inflation; the 1980s were a period of falling inflation; and the 1990s were a period of low and very stable inflation. The variability of exchange rates has been essentially the same in all of those three decades, notwithstanding very different experiences with respect to inflation. Similarly, in the 1970s fiscal deficits went up, particularly in the United States. The fiscal deficit was very large in the 1980s, came down in the 1990s, and is now a surplus. In the 1970s and 1980s, European monetary policy largely targeted monetary aggregates. Now it targets inflation. In the 1980s, for a while, US monetary policy targeted non-aggregates. Since then, it has been more eclectic. Thus, despite all the differences that have existed in the behavior of the economy – in terms of inflation, real growth, the orientation of monetary policy, etc. – the variability of exchange rates has stayed right around 3 percent per month or a little bit less.

**Table 1. Selected Industrial Economies: Volatility of Monthly Bilateral and Effective Exchange Rates, 1973-1998 (%)**

Currency	Bilateral Rate versus U.S. dollar		Effective Exchange Rate	
	Nominal	Real	Nominal	Real
<b>Australian dollar</b>				
Whole Sample	2.3	2.3	2.4	2.3
First Third	2.0	1.9	2.1	2.2
Second Third	2.8	2.8	2.6	2.6
Third Third	2.0	2.0	2.2	2.2
<b>Belgian franc</b>				
Whole Sample	2.7	2.5	0.8	0.8
First Third	2.7	2.0	1.0	1.0
Second Third	3.0	2.9	0.6	0.6
Third Third	2.6	2.6	0.8	0.8
<b>Canadian dollar</b>				
Whole Sample	1.0	1.1	1.2	1.3
First Third	1.0	1.0	1.0	1.1
Second Third	1.0	1.0	1.3	1.4
Third Third	1.0	1.1	1.2	1.2
<b>Finnish markkaa</b>				
Whole Sample	2.5	2.5	1.4	1.4
First Third	1.8	1.5	0.9	1.0
Second Third	2.7	2.7	1.2	1.2
Third Third	2.9	2.9	1.8	1.8
<b>French franc</b>				
Whole Sample	2.7	2.4	0.9	0.9
First Third	2.6	1.9	1.0	1.1
Second Third	2.9	2.9	0.8	0.6
Third Third	2.5	2.5	0.9	0.8
<b>Deutsche mark</b>				
Whole Sample	2.8	2.5	0.9	0.9
First Third	2.9	2.0	1.0	1.1
Second Third	2.9	2.9	0.8	0.6
Third Third	2.6	2.6	0.9	0.8
<b>Italian lira</b>				
Whole Sample	2.5	2.4	1.4	1.4
First Third	2.6	1.7	0.7	0.9
Second Third	2.5	2.6	0.6	0.9
Third Third	2.7	2.7	2.1	2.1
<b>Japanese Yen</b>				
Whole Sample	2.9	2.9	2.5	2.5
First Third	2.6	2.5	2.3	2.4
Second Third	3.0	3.1	2.5	2.3
Third Third	3.1	3.2	2.8	2.8
<b>Dutch guilder</b>				
Whole Sample	2.7	2.5	0.7	0.7
First Third	2.7	2.0	0.8	0.8
Second Third	2.9	2.9	0.7	0.7
Third Third	2.6	2.7	0.7	0.7

Table 1 (continued)

Currency	Bilateral Rate versus U.S. dollar		Effective Exchange Rate	
	Nominal	Real	Nominal	Real
<b>Swedish kronor</b>				
Whole Sample	2.5	2.4	1.5	1.6
First Third	2.3	1.6	1.6	1.7
Second Third	2.5	2.5	0.4	0.7
Third Third	2.8	2.9	2.0	2.0
<b>Swiss franc</b>				
Whole Sample	3.1	2.9	1.4	1.4
First Third	3.1	2.5	1.5	1.4
Second Third	3.3	3.2	1.2	1.2
Third Third	3.0	3.0	1.4	1.4
<b>British Pound</b>				
Whole Sample	2.6	2.6	1.8	1.9
First Third	2.4	2.2	2.0	2.2
Second Third	2.8	3.0	1.6	1.7
Third Third	2.6	2.6	1.9	1.9
<b>U.S. dollar</b>				
Whole Sample	...	...	1.7	1.7
First Third	...	...	1.7	1.9
Second Third	...	...	1.7	1.6
Third Third	...	...	1.4	1.4
<b>Synthetic euro</b>				
Whole Sample	2.6	2.6	1.6	1.6
First Third	2.4	2.7	1.7	1.8
Second Third	2.8	2.7	1.5	1.5
Third Third	2.5	2.5	1.4	1.4

Source: IMF, *International Financial Statistics*, Information Notice System; WEFA.

Exchange rates between the US dollar and European currencies vary under a floating exchange rate regime. The euro was created a little bit more than a year ago, and what is the standard deviation of the monthly change of exchange rate between the euro and the US dollar over the past 15 months? A little bit less than 3 percent per month. (Table 1)

In the case of the Canadian dollar versus the US dollar, however, the monthly variability in the exchange rate has consistently been based on trade with the US. For both policy reasons and economic reasons, large fluctuations between the Canadian dollar and the US dollar are inconvenient. A natural functioning of the economic system tends to keep the degree of the fluctuation of the Canadian dollar and the US dollar relatively limited. In contrast, trade between Europe and the United States is not a large function of either European GDP or American GDP. Trade between Japan and the United States is not a large function of either Japanese GDP or US

GDP. Thus, the exchange rate fluctuations between the United States and Japan or the United States and Europe are not as limited as those between the US and Canada.

If we look within Europe, we observe (as we do between the United States and Canada) a low degree of fluctuation of exchange rates. Part of the reason for that is, of course, the various policy efforts in Europe – starting first with the European snake, then with the European Monetary System, and now finally with the euro – to limit exchange rate fluctuations among the countries participating and those mechanisms.

If we look at Switzerland (which maintained a floating exchange rate vis-à-vis the Deutsch mark), we observe that the variability of the Swiss franc's exchange rate vis-à-vis the Deutsche mark is very limited for essentially the same reason that the variability of the Canadian exchange rate versus the US dollar is very limited. Most of Switzerland's trade and a substantial fraction of its GDP is involved in trade with the countries of the European Union. For that reason, the degree of exchange rate fluctuation between the Swiss franc and the currencies of the EU is naturally quite limited. The degree of fluctuation of the Swiss exchange rate with the US dollar, however, is right around 3 percent per month – the same as is true for the variability for other European currencies versus the US dollar. Thus, it is not whether Switzerland is pegged to the Deutsche mark that determines its variability against the US dollar. It is determined by the fact that Switzerland does not have particularly tight economic linkages to the United States. It does have quite tight economic linkages to most of Europe, so its exchange rate variability vis-à-vis Europe is comparatively low, while its exchange rate vis-à-vis the United States is comparatively high. This is true not only in one sub-period, but throughout the entire experience with floating.

What economic conclusions can we derive from these facts? Well, one is that so long as exchange rates continue to float between the US dollar and the euro, we are going to continue to see significant exchange rate variability on a shorter-term, medium-term, and longer-term basis, probably on the order of about 3 percent per month. That is the operating characteristic of the system. Now, for a country like Egypt that has important trade linkages both with the European Union and the United States, that is a fact you are just going to need to live with. The degree of fluctuation that we have seen between the dollar and the euro over the course of the past 15

months (and before that, the fluctuation between the dollar and the European currencies) is something very likely to continue for the foreseeable future. This factor needs to be taken into account when thinking about the exchange rate policies for Egypt and other countries.

One further fact gained from the experience of industrial countries is worth taking note of. I mentioned that in Europe there had been a variety of efforts beginning with the so-called European snake, extending with the creation of the European Monetary System in March of 1979, continuing with the agreement on the Maastricht Treaty in late 1991, and culminating with the formation of the Euro area in January of 1999. These efforts were all made in an attempt to limit exchange fluctuations within the European economic space. Those efforts ran into major difficulty with the EMS crisis of 1992/1993. Earlier, the system had functioned with occasional adjustments of the exchange rate under the European Monetary System without an atmosphere of crisis. However, in 1992/1993 it was no longer possible to make minor adjustment of the exchange rate in an adjustable peg system without generating large capital flows and a sense of economic crisis.

Why was that? One important reason is that over time, Europe moved from a situation where capital mobility among European countries was quite limited (during the early stage of the post-war period) to a system in which it took place essentially without any restraint. That movement from a system of controlled international capital movement to a system of very open and liberal international capital movements made it increasingly difficult to maintain a system of adjustable pegged exchange rates within the European economic space. Under a system of very liberal capital movement, as soon as financial markets begin to believe that the exchange rate peg is no longer sustainable, very large flows of capital build up against the exchange rate and force an adjustment. Thus, one conclusion that can be drawn from the experience in Europe is that maintaining an adjustable peg exchange rate regime in any country with a very high degree of openness to modern agile international capital markets is extremely difficult.

Let me mention one final point about the experience of the industrial countries that is directly relevant to a point I will raise. What do we mean by floating exchange rate? The United States has a floating exchange rate in almost the ultimate sense. The exchange rate, while not a



completely irrelevant concern of economic policy, is almost never a critical factor influencing decisions about economic policy, especially monetary policy. When the Federal Reserve meets every six weeks to decide whether to maintain, raise, or lower the federal funds rate, which is their principal monetary instrument, the exchange rate of the dollar has rarely (perhaps three times in the last 30 years) had a significant influence on their decision. The Federal Reserve essentially conducts monetary policy with benign neglect toward the exchange rate. That does not mean, however, that the exchange rate exerts no longer-term influence. The fact that the dollar has been very strong in foreign exchange markets has helped to keep US inflation relatively low over the past two to three years, which has influenced US monetary policy over the course of time. But in terms of any immediate decisions, the exchange rate very rarely has any substantial influence.

This is not true of virtually any other country that has a floating exchange rate. Even the Bundes bank, when it was operating German monetary policy, paid meaningfully more attention to the exchange rate of the Deutsche mark in deciding on its adjustments of short-term interest rates than did the Federal Reserve. Likewise, the authorities in Japan intervene very actively in the foreign exchange market to resist what they regard as unwarranted and undesirable appreciation of the yen. If it were not for the fact that they have already pushed interest rates down to zero and cannot push them any lower, they would be adjusting interest rates in an effort to influence the exchange rate as well. When the Swiss National Bank thinks about Swiss monetary policy, they pay very close attention to what is happening to the exchange rate. Similarly, while Canada does not attempt to peg the currency, the behavior of the exchange rate certainly is an important factor influencing monetary policy.

It is important, therefore, that when we think about a floating exchange rate, we do not think we are in the United States and therefore that we have the luxury of treating the exchange rate with benign neglect. For most countries with a floating exchange rate regime, the exchange rate continues to have a significant influence on the conduct of national monetary policy. With that observation, let us now discuss the situation of exchange rate regimes for developing and transition countries, including the emerging markets.

### **3. Exchange Rate Regimes for Developing and Transitional Countries**

Before we begin, let us consider a couple of facts: We should first establish the number of countries we are talking about. There are 182 members of the International Monetary Fund. Twenty-six of them are classified as advanced economies, while the rest are emerging markets or developing countries. We are therefore discussing over 150 countries. These countries vary enormously across a variety of dimensions and characteristics. Some of the countries characterized as developing countries or emerging market countries (those at the very top) have per capita incomes that are now approaching those of the industrial countries. Some of them, particularly those who have high per capita income, have very sophisticated economic and financial systems and a very high degree of contact with the rest of the world economy through both trade and capital movement.

At the other extreme, we have a large number of quite small economies. Many of these countries have small populations, although some have larger populations that are quite poor and are not very economically or financially sophisticated. Of course, there is an enormous degree of variation between the very poor small countries and the very highly advanced developing and emerging market countries. Egypt is in the middle range of developing and emerging market countries. It is a relatively large country in terms of population and moderately large in terms of GDP. Egypt's degree of contact with international capital market is significant, but nowhere near that which would characterize an economy like Hong Kong or Singapore. We need to be aware of these wide divergences when thinking about exchange rate regimes for developing and emerging market countries because they are as important for the issue of exchange rate regimes as they are for other economic policy issues.

Another point we must consider is that a very wide variety of exchange rate regimes have been adopted and remain in place for developing countries. A few developing countries have employed the so-called "dollarization" system, adopting another country's currency as their national currency. Examples of countries who use this system include Panama, where the dollar was adopted long ago, and Ecuador, who is presently in the process of adopting the dollar as its national currency. Furthermore, in Botswana and Namibia, the South African rand operates

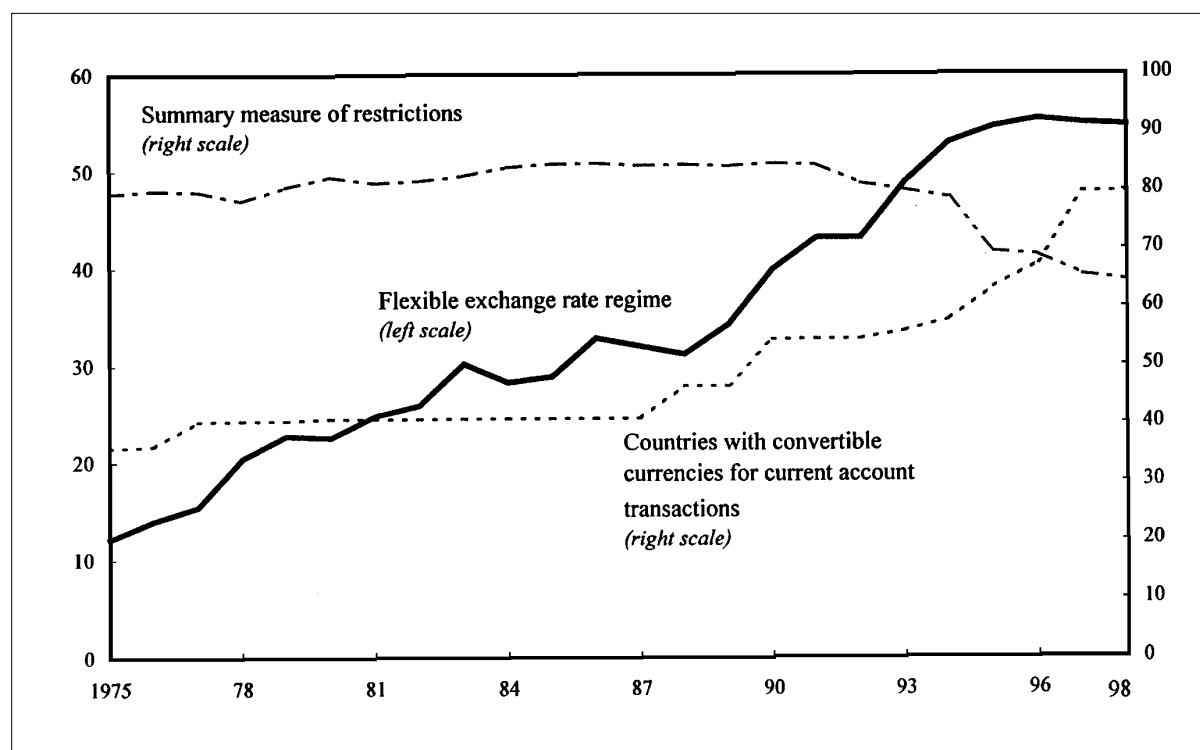
together with the domestic coinage as national currency. Other countries adopt so-called currency boards, which means they rigidly link their domestic monetary policy to foreign exchange inflows and outflows and then peg their national currency very tightly to the currency of another country. This is true for Argentina and Bulgaria. Many other countries that do not have currency boards maintain quite rigidly pegged exchange rates that have persisted over long periods of time. Other countries have adjustable pegs, where the exchange rate is pegged at a particular level for a while but is subject to periodic adjustments.

Some countries have crawling pegs where pegged exchange rates adjust gradually over time. Turkey, for example, has moved from a system where it used to allow the exchange rate to fluctuate (pretty much continuously towards devaluation) to a crawling peg. In fact, by reducing the rate of crawl to a couple of percentage points per month, Turkey lowered its inflation rate from around 100 percent for the last 2 or 3 years to around 20 to 25 percent this year, and hopefully even lower in the future. Other countries do not have crawling pegs, but crawling bands or adjustable bands. Some developing and emerging market countries have various forms of managed float, which are difficult to describe in general, but involve no fixed commitment to maintaining a particular exchange rate but rather allow the exchange rate to adjust, within limits. Thus, there are obviously a wide variety of exchange rate arrangements for developing and transition economies.

For developing and emerging market countries, however, there has been a gradual move over time away from pegged exchange rates and toward more flexible exchange rate arrangements. As you can see, in 1975 barely 10 percent of countries reported that they had flexible exchange rate arrangements, but as of 1998 nearly 90 percent of developing countries claimed to have some form of flexible exchange rate (See Chart 2). Keep in mind, however, that this change is certainly less dramatic than is reported here because countries often say their exchange rate regime is something different from what it actually is. If you are doing empirical work, it is a source of great irritation when countries say they have a flexible exchange rate and nevertheless have an exchange rate pegged. China, for example, described its exchange rate regime as a flexible exchange rate regime; yet, the exchange rate of the renmimbi versus the dollar has what

has been described as the cardiogram of a rock. So, while there has been a move towards greater exchange rate flexibility on the part of developing countries, the reported move in this direction is less significant than reported. In fact, there are a large number of developing countries that still maintain some form of exchange rate peg as their basic exchange rate regime even though they do not necessarily say so.

**Chart 2. Developing Countries: Evolution of Exchange Rate Regimes and Exchange Restrictions (%)**



Source: IMF, *Annual Report on Exchange Arrangements and Exchange Restrictions*

What then can be said about the relationship between the characteristics of a country and the desirable nature of its exchange rate regime? Before beginning this part of the discussion, let me emphasize that there is no single answer to what is the best exchange rate regime for a particular country. Some characteristics do tend to make one form of exchange rate regime a better choice than another, but there are always exceptions to this rule.

To emphasize this point, let me go back to the industrial countries for a moment and focus on two countries: Austria and Switzerland. These two countries are very similar – they are similarly situated, similar in size, and are at similar levels of development and financial sophistication. Switzerland, however, is certainly very far advanced from a financial standpoint. Austria pegged the Austrian shilling absolutely to the Deutsche mark from 1979 until the formation of the euro, and therefore had an absolutely rigid peg for 20 years. Switzerland, on the other hand, floated the Swiss franc beginning in 1973 and still floats the Swiss franc vis-à-vis first the Deutsche mark, and now the euro. The pegged exchange rate worked very well for Austria, while the floating exchange rate has worked very well for Switzerland.

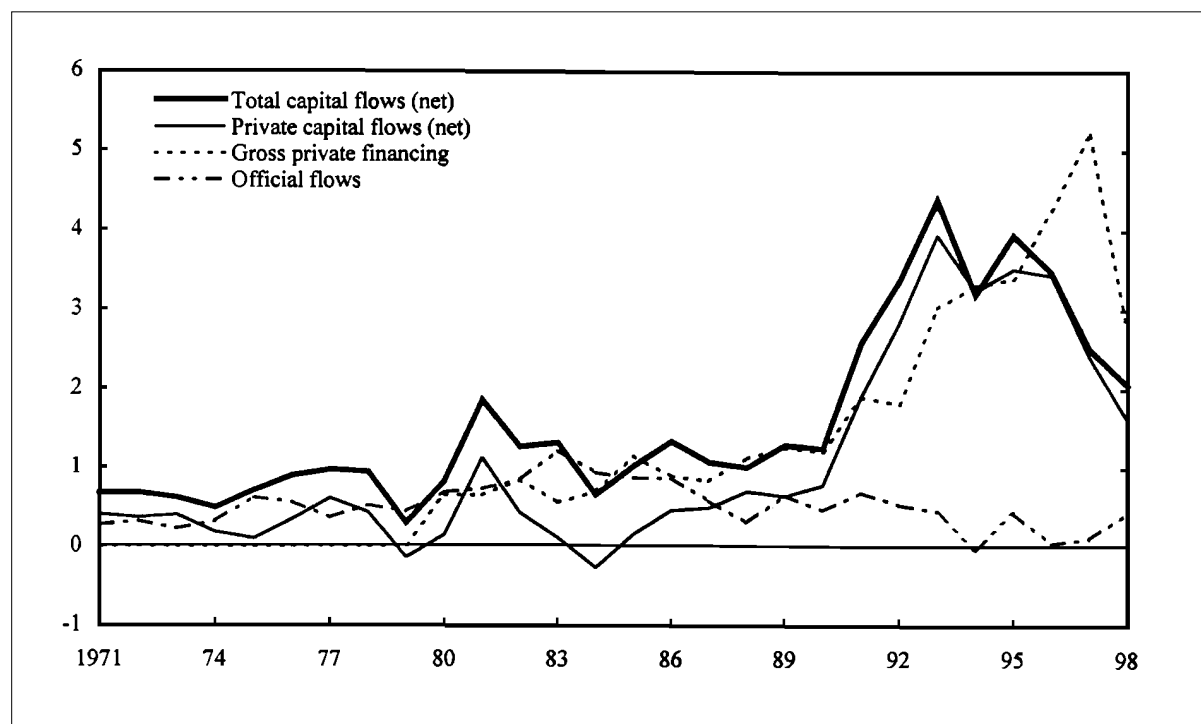
How can Austria and Switzerland be so similar, yet there is no implication that they should therefore have the same type of exchange rate regime? The answer lies in the fact that the two countries recognize that other elements of their economic policies need to be adjusted in the right way. Switzerland has an independent monetary policy, independent of the Bundes bank and now the European Central Bank. Austria surrendered this monetary independence when it pegged the exchange rate. Keeping this last point in mind, the characteristics I am now going to describe point in the direction of what may be a desirable exchange rate regime.

#### **4. Desirable Exchange Rate Regimes**

We should acknowledge that countries that have relatively limited contact and involvement with modern international capital markets do clearly find it easier to maintain a pegged exchange rate or an adjustable-pegged exchange rate regime. If the exchange rate comes into question, the absence of capital mobility will make it much more difficult to amass large-scale speculative pressures all at once. Thus, countries that have limited capital market involvement find it easier to maintain exchange rate pegs. China, for example, was able to maintain its exchange rate peg throughout the Asian crisis, notwithstanding that it has a very weak banking system and a variety of other economic problems. Countries that had similar kinds of problems but highly open policies towards capital movement, on the other hand, found it very difficult to maintain their exchange rate pegs under the pressures of the Asian crisis. Therefore, it seems that a degree of closure to international capital markets provides a degree of isolation which helps to sustain an

exchange rate peg. (Notice, however, that the developing countries have increasingly been more open to capital inflows, as can be see in Chart 3)

**Chart 3. Developing and Transitional Countries: Total, Private, and Official Capital Flows (% of GDP)**



Source: IMF, *World Economic Outlook* Database and Developing Countries Bonds, Equities and Loans Database

What other characteristic of countries helps them maintain an exchange rate peg? Typically speaking, for countries that are very small and not very financially sophisticated (countries with GDPs less than 5 or 10 billion dollars per year), an exchange rate peg is often the right answer. Why is that? There is a limit beyond which, if you are sufficiently small, it does not make sense to have your own national currency. Many of the Caribbean countries peg rigidly to the US dollar; Nepal pegs rigidly to the Indian rupee. For small countries, particularly those with small economies and/or a dominant trading partner, having an independent national currency and an independent national monetary policy does not buy them very much and a rigid exchange rate peg is often the right answer.

On the other hand, where does an exchange rate peg get into difficulty? As I mentioned, countries that have a high degree of involvement with international capital markets often find an exchange rate peg more difficult to sustain, although it is not impossible. If we look at Argentina or Hong Kong, they have exchange rate pegs to economies that are not necessarily the same as they are. Yet, they are able to sustain those exchange rate pegs largely because of two vital policy considerations. First, the overriding objective of their monetary policy is the maintenance of the exchange rate peg. Second, they have very strong banking and financial systems that are capable of withstanding the pressures that arise when the exchange rate peg does come into question. Due to Hong Kong's strong and highly capitalized banking system, the monetary authorities were able to raise domestic interest rates during the Asian crisis to fend the exchange rate peg without fear that they would cause their banks to go bankrupt. Similar efforts were made by a number of other Asian economies, creating severe difficulties in what were very weak banking systems. Thus, a small open economy (or relatively small in the case of Hong Kong) with a high degree of capital mobility can maintain an exchange rate peg, but it needs to have a very firm commitment of monetary policy and a very strong banking system and financial system.

## **5. Conclusion**

In conclusion, let me make the following points with respect to developing and emerging market countries. First as I said before, we have a wide range of countries with a wide range of exchange rate regimes. That is a situation that is as it should be; no single exchange rate regime is best for all countries under all circumstances and conditions. Second, we have observed a movement of exchange rate regimes (although not as dramatic as the chart suggested) towards increased exchange rate flexibility. This movement is generally consistent with the fact that developing countries have been moving to a higher degree of openness in both trade and capital movements, and that trade has been more diversified. Developing countries no longer trade with a single trading partner, but with a multiplicity of important trading partners. For these reasons, pegging to a single currency is less convenient and/or less appropriate.

But different circumstances call for different exchange rate regimes. We have observed a number of emerging market and developing countries that maintain exchange rate regimes that would, on the basis of the normal characteristics we associate with different countries, suggest that alternatives would be preferable. When a pegged exchange rate regime is sought, it is imperative that the policies supporting the exchange rate regime are consistent with its maintenance and stability.



## PART II: DISCUSSION

### ALTERNATIVE EXCHANGE RATE REGIMES

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Participants in the discussion following Michael Mussa's presentation included Adel Bishai, professor of international economics at the American University in Cairo; Ahmed Galal, Executive Director of the Egyptian Center for Economic Studies; Ali Negm, Chairman of Delta International Bank and former Governor of the Central Bank; Ali Soliman, ministry of International Cooperation; Fouad Sultan, Chairman and Managing Director of Al Ahly for Development and Investment (ADI) and former minister of Tourism; Gouda Abdel-Khalek, professor of economics at Cairo University; and Wagih Shindy, former minister of Investment and Economic Cooperation. The following is a summary of the discussion.

**Participant:** I do appreciate very much the very wide spectrum Dr. Mussa gave us about exchange rate regimes and their development, but he did not discuss exchange rates in our part of the world, particularly in Egypt. The exchange rate in Egypt is very important to us. As a matter of fact, we have been discussing this issue for the last at least 20 years as we have gone through different stages of development. In the beginning of the 1970s, an Egyptian going abroad was allowed a foreign exchange equal to LE 5. In 1975, the Ministry of Economy decided to allow Egyptians going abroad to have at least a few pounds in their pockets so that when they returned they could pay for tips or for the taxi. Now Egyptians are able to transfer whatever amount they have by phone outside of Egypt. We have come a very long way.

Of course, this has been possible because the government increased the interest rate to almost 18 and 20 percent and devalued the pound significantly in the early 1990s. Everyone was then able and had the incentives to transfer whatever money he held outside or within the country to Egyptian pounds. At that time, the interest rate on the US dollar was very low. We have been able to compile almost 19 to 20 billion dollars in reserves, and now the exchange rate is fluctuating, but not enough to reflect the actual situation in the market place. Thus, our reserves went down by at least 3 billion US dollars in the last few weeks and the debate is still going on.

Should we increase the interest rate on the Egyptian pound again? What would be the effect, especially on investment, production, and labor within the country? That is why I think a more flexible exchange rate policy is required to reflect the situation in the market place.

**Speaker:** Well, Egypt is a very interesting case. If we go back 25 years in Egyptian economic history, it was a very closed economy, trade was not extensive, and opportunities for capital movement were virtually non-existent. Circumstances have changed very dramatically since then. Not only has capital mobility picked up, but trade has become more extensive with a much wider set of trading partners. This has changed the economic landscape in Egypt primarily for the better. It has also changed the considerations that are relevant for the exchange rate regime. Under the old system, you could basically say what the exchange rate was going to be and enforce it by fiat. That is clearly no longer the case. The exchange rate regime does need to take account of the realities of both trade and capital movement. It is important to understand what some of those realities are.

The Egyptian pound is pegged to the US dollar, and one of the recent sources of difficulty is that the dollar has been very strong. We went from 1.17 dollars to the euro on January 3, 1999, to .94 dollars to the euro today. Thus, on an effective basis, the Egyptian pound has appreciated quite considerably against its average trading partner. This has clearly strained the foreign exchange market and contributed to an outflow of the foreign exchange reserves. We are clearly in a very different situation from the one that existed 25 years ago. I think the issue of the exchange rate regime and how it is adjusted in relationship to other economic policies must take serious account of those differences.

Looking forward, the US dollar and the euro are going to continue fluctuating in terms of their relative value. Because Egypt has important trade linkages to the United States, but even more so to the Euro area, its exchange rate is going to come under pressure if the peg continues to the US dollar and the dollar continues to show these large scale fluctuations against the euro. If one wants to maintain an exchange rate peg in a circumstance where the dollar appreciates strongly against the euro and reserves are flowing out, then you need to be prepared to tighten

domestic monetary and credit conditions in order to resist the capital outflow. Some of that has been happening, but the experience in other countries that have had dollar exchange rate pegs is not dissimilar. When the yen-dollar exchange rate began to fluctuate, increased pressure was put on them and they needed to be able to respond. In the face of those pressures, the viable options to maintain the exchange rate peg were to either adjust the exchange rate or tighten domestic financial policies.

**Participant:** We cannot finish the discussion with a very distinguished member of the IMF staff without asking about the views now circulating, including discussion of the board of IMF and the G7 meeting about the international monetary system.

You seem to predict that exchange rate fluctuations will continue in the future. Considering that no country can fend off some of the changes in currency rates by itself through monetary policies or any other means, are we happy with the international system as it is? What does the IMF think about the international financial system? Are we likely to see group action within strong countries or perhaps other countries that would try to create protective measures from these large fluctuations?

**Speaker:** As I indicated in my initial remarks, exchange rate fluctuations among the major currencies have been a fact of international life since the early 1970s and I expect they will continue to be such. There clearly have been occasions where exchange rate fluctuations among the major currencies have proceeded to a degree that was decidedly unhelpful in terms of the performance of the world economy. There have been subsequent efforts to limit these fluctuations, but the tools available for that purpose are quite limited. The one powerful tool that is potentially available would be the use of national monetary policies in the largest countries to attempt to stabilize exchange rates. The difficulty is that the cure could turn out to be worse than the disease.

The dilemma we face at present is that the US dollar is very strong, stronger than it really should be on a medium-term basis. The euro is very weak relative to what it ought to be on a

medium-term basis. But, suppose we wanted to use monetary policy in the US and Europe to address that question? To bring the dollar down, we would need to ease US monetary policy, but that appears unwise in a circumstance where inflationary pressures in the US are beginning to pick up. If we ease US monetary policy now we would probably accelerate inflation and, a year or so later, the Federal Reserve would need to come in and stop the surge of inflation. That might cause the dollar to bounce up before it comes down, but would also add very considerable turbulence to global financial markets. Thus, easing US monetary policy at the present moment does not seem like a desirable option, even though we think the dollar is too strong.

Similarly in Europe, tightening monetary policy aggressively to strengthen the euro might bring an early end to European expansion, which is just getting started. That would not be helpful to Europe, and certainly would not be helpful to Europe's trading partners. Egypt would not benefit if we saw Europe turn from expansion to recession. Therefore, it does not seem that we want to change either US monetary policy or European monetary policy aggressively to influence the exchange rate. We just need to live with it.

There are other circumstances when monetary policy can be used. In 1995 we thought an easing of both Japanese and European policy made sense to resist what was then an over-depreciation of the dollar. The easing of European and particularly Japanese policy in the spring and summer helped to stabilize the dollar and later brought about some appreciation from its low point in March. Occasionally there are circumstances in which monetary policy can be adapted to help to stabilize major currencies' exchange rates. But that is true for half the time and is not true for the other half.

There is also the option of using exchange market intervention to influence exchange rates. However, I do not think that is feasible. If industrial countries were prepared to intervene in foreign exchange markets on the order of hundreds of billions of dollars over a period of a few weeks or months, then intervention might stand the chance of success. But intervention in measly amounts of 10, 15, or 20 billion dollars appears to have essentially no effect. Thus, I fear the best we can hope for is to be able to use monetary and occasionally fiscal policy to help stabilize

exchange rates in the circumstances where they are appropriate. We are just going to need to live with a high degree of fluctuation in most other incidences.

**Participant:** What I gathered from the lecture by Mr. Mussa is that the international monetary system or the lack of it will continue to prevail for some time and it is up to the national authorities of each nation-state to decide what kind of exchange regime to adopt. Perhaps it would be useful to remind ourselves that the exchange rate is not important in itself, but should be looked at in the broader context of the overall socioeconomic objectives of the country. We must consider a country's ability to manage the exchange rate within the overall macromanagement of the economy. My question for Mr. Mussa regards the fact that after the collapse of the Bretton Woods system in the early seventies and particularly in the eighties and nineties, capital mobility became one of the sacred cows of the system. The International Monetary Fund insists that any country should, as much as possible, abide by capital mobility. This issue must be reevaluated considering that for a country like Egypt, for example, we have a pegged exchange rate regime that I think has involved tremendous costs on the Egyptian economy. Without raising the question directly whether to devalue or not (that is a separate issue, as Ahmed rightly said), the question is what kind of exchange rate regime to adopt?

Let me throw in some ideas for discussion. One is that Egypt has relatively successfully maintained the peg since 1991 with some increasing difficulties over the past couple of years due to a mounting trade deficit. That should signal something to a person who is reading the fundamentals of the Egyptian economy. The other point is the mounting domestic debt. The domestic debt is neither independent of the peg nor the tight monetary policy adopted through 1995 that resulted in massive capital inflows, mostly of the portfolio or short-term speculative nature. A very important question, then, is what purpose does it serve to continue to hold to an exchange regime that has outlived its purpose of the peg? I think any delay in rethinking the exchange rate regime in Egypt would prove very costly, not in the long run, but I fear to say in the short term because the peg is unsustainable right now.

Finally, I would like to mention some of my ideas as to how to deal with this problem. Number one, we have to de-link the pound from the dollar or if you like, we can opt for a basket of currencies in which the dollar would be included. Number two, it may be better for Egypt to adopt a crawling peg rather than an adjustable peg. If we agreed on an adjustable peg, I think we would have to increase the width of the band from the current situation. Finally, I think Egypt will have to move rather quickly to put some lid on capital mobility, but I don't think that the situation in Egypt affords that.

**Participant:** As you know, the pound is pegged only to the dollar. My first question is whether Egypt should consider pegging to a basket including the dollar, the euro and maybe the Yen? My other question regards the fact that our foreign exchange market is divided into three main sectors. The Central Bank is capturing about 50 percent of the foreign exchange coming into this country from exports of oil and the Suez Canal. The commercial banks also receive some proceeds of foreign exchange from tourists and remittances of expatriate workers. Finally, we have the exchange companies created in 1991, and I believe they are flexible in deciding their own rates. Sometimes they capture more than the commercial banks. By having such a market, is it feasible that we keep the present regime as it is or does it need adjustment?

**Speaker:** The issue of what to peg to (if you are going to have a peg) is an important question for Egypt. It is clear that Egypt's trade pattern is not dominated by trade with the United States. For that reason, a unified peg to the dollar is clearly not recommended. I think it is clear that if the peg selected in 1991 had involved a basket of dollars and European currencies (Japanese yen is much less important in the case of Egypt), some of the problems we have seen recently with the strong appreciation of the dollar would have been ameliorated.

Going forward, it needs to be recognized that the dollar and the euro will probably continue to fluctuate with a fair degree of volatility. Therefore, when the issue of altering the exchange rate basket does come up for decision, I would think a more balanced basket would probably make sense in those circumstances. You do not want to make this shift precisely at the time

when the dollar is at the top. Such a move would mean that you are in a much tighter situation going forward. The present exchange peg would be considerably more comfortable from the Egyptian perspective if the dollar were to go back down 15 percent against the euro. At that point I think I would consider the question of whether the basket should not be revised to involve a substantial component of the euro as well as the dollar.

Going back for a moment to the question of capital mobility, Egypt does not have a completely open capital account. If the hedge funds want to speculate against the Egyptian pound, for example, it is very difficult for them to be able to take short positions in the Egyptian pound the same way they could in the Thai baht or some of the other East Asian currencies. Thus, while there is freedom of Egyptian residence to take money out of the country, by and large there is not the same freedom that exists in many other markets for large-scale financial institutions to take a very large short position in the domestic currency and simply blow the exchange rate out of the water. In Egypt's present situation, I certainly would not recommend further capital market liberalization that would permit those type of speculative operations to take place. If Egypt is going to maintain some type of exchange rate peg, then it would probably want to continue to limit those type of speculative capital movements.

With respect to the foreign exchange market, at some point Egypt may want to adopt a more flexible attitude towards the exchange rate that would allow more movement in response to market forces. After this adjustment, I would think the tri-partied system you described would benefit from some further development, allowing markets to price foreign exchange internally. We are not yet at that stage of development in Egypt. There have been a lot of disastrous experiences where countries that had pegged exchange rate regimes like Egypt suddenly gave up on the peg and then things just blew apart and no one had any idea what the exchange rate should be. In these circumstances, the market turned out to be very thin and fluctuated widely over short instances. It would be better for Egypt to avoid that and rather to develop a situation where the institutions of a more highly developed foreign exchange market can gradually emerge. Some degree of stability can be present even in circumstances where the Central Bank tightly controls the rate and availability of foreign exchange.

**Participant:** The question that was and is still being asked is why is the international monetary system chaotic? what are the proposals for reform? and why they have not worked? In today's world of globalization and increased interdependence, these questions have become more pressing. Yet, there still is no answer to this question.

I suspect that large-scale capital movements can be very destabilizing. Proposals have been advanced, such as Tobin's Tax to encourage the transfer of money in favor of longer time rather shorter time. Money is moving everyday on the order of \$1.3 trillion due to electronic trading, etc. I would like your views on what to do vis-à-vis the massive capital movements in today's globalized world done through electronic trading. Do you think there should be some controls?

**Speaker:** We should keep in mind that when talking about developing and emerging market countries, a general rule is that they are not open to international capital movements on the basis that you described. Egypt is not in the situation where a large scale of financial enterprises can easily speculate against the Egyptian pound. Likewise, I do not think it would be desirable to open Egypt's financial system to make that possible at this stage. Egypt is not alone in that situation; most developing countries around the world do not have open capital markets in the same sense that the United States and Euro area, or even advanced emerging markets countries like Hong Kong do. It is a mistake for countries to move rapidly to that type of openness as it creates more problems than it resolves.

We have not talked about the situation in the Egyptian banking system, and I do not want to get into that issue at substantial length. Let me simply say that Egypt does not have a domestic banking system that is ready for full scale, open participation in the global financial system. There are far too many examples of countries that have liberalized with weak banking systems and have produced a disaster. Egypt is not at that stage of its financial development. The significant degree of control over international and financial transactions practiced at present should not be removed suddenly, or you will run the risk of creating substantial difficulty. When looking down the road ten, fifteen, or twenty years, we should focus on building the institutions



that will support developing the financial system of the economy to make it ready for such involvement.

**Participant:** We appreciate very much the recommendation made that all countries in this part of the world, especially developing countries, have to tailor their exchange rate regimes according to their needs. However, in the opinion of the Egyptian business community, the implications of keeping the exchange rate regime pegged to the dollar is now seriously affecting the economy. We are feeling very deep recession that has lasted for a couple years; interest rates are quite high in comparison to the inflation rate in Egypt; the accumulated inflation differential between Egypt and the main trading partners is leading to a substantial loss in competitiveness of the economy; and squeezing the liquidity is affecting business at large. I know you cannot speak very openly about your recommendation to the Egyptian government, but we hope that you may give the business community an indication of the future economic outlook of the country so that we may be able to come up with decisions related to investments, prosperity, and growth.

**Speaker:** As I indicated before, I will not comment directly on the issue of exchange rate adjustment. It is essential for the policy authority to recognize the realities in which they operate, and that those realities are very different from what they were 20 years ago. It is a reality that the dollar has appreciated quite strongly now against the euro from where it was 15 years ago. Undoubtedly, the exchange rate pegged to the dollar makes Egyptian business less competitive than if the euro had strengthened rather than weakened.

In that type of environment, when you have a pegged exchange rate and you are suffering losses of foreign exchange reserves, there is really no alternative but to tighten domestic credit conditions in order to stem the loss of more exchange reserves. It is a complicating factor that the government budget position is placing significant demands for domestic credit, itself. That tends to crowd out the availability of credit to the private sector. The policy nexus needs to be addressed as a whole. If you are going to sustain the exchange rate peg in expectation that the dollar will correct downward against the euro, then you need to have sufficiently tight financial

policies in the interim to limit the loss of foreign exchange reserves. If you do not want that to impact the private business sector too negatively in terms of the cost or availability of credit, then the government needs to adjust its fiscal position to reduce demands placed on the available supply of credit. If you are not prepared to take any of those adjustments, then you find yourself in a very difficult situation where you are sort of hoping that something external will happen that will rescue the situation. It is certainly possible that it could happen, but I would not hold my breath that it will happen in the next month or two.

**Participant:** The pound is trading about 5 to 7 percent below expectation and we have lost about 25 percent of our international reserves over the last year. I have two questions. First, would you advise the authorities to move the exchange rate rather than let things happen the way they are? Second, in case the pound is depreciated by 10 or 15 percent, which sectors of the economy are the potential losers and winners?

**Speaker:** In terms of the second question, its clear that if you have an adjustment of the exchange rate, generally speaking, it will not be transmitted immediately to all domestic prices and wage rates that the export-related sectors of the economy tend to benefit from. On the other hand, because the price of imports usually reflects quickly any upward movement in the price of foreign currencies, purchases of imported capital goods as well as consumer goods will be among the losers. Egypt is in a situation where it derives a substantial amount of its export revenues from oil. Since oil is priced internationally in terms of dollars there is a very little effect of exchange rate on the magnitude of those export proceeds. The oil sector may enjoy some marginal benefits from depreciation, but it is not the same thing as would be true for, say, the manufacturing sector.

In terms of the exchange rate, the effective exchange rate has depreciated from the officially quoted market rate, at least for a certain range of economic transactions. This situation in Egypt is not unusual from what we have observed in a number of other countries when there are substantial losses of reserves and the exchange rate comes under pressure. There is no single

answer as to what to do in this situation. There must be recognition of the range of alternatives. If you want to sustain the official exchange rate without too much shading at the margin in the face of substantial loss of reserves, then there is little alternative but to maintain relatively tight domestic credit conditions. To avoid an undue and large burden on the availability of credit to the private sector, then the government budget needs to adjust to reduce its demand on available credit resources.

Those are the choices that are available to the policy authorities if their decision is that they want to sustain the present exchange rate regime and the present level of the exchange rate peg in the expectation that a downward correction of the dollar will make that peg viable in the longer term. It has been noted that Egypt has experienced some considerable loss of reserves. Egypt has quite large reserves relative to its import bill, so utilizing some of those reserves in the interim to help cushion the adjustment is not an unreasonable practice. There is a limit, however, to how much of the problem can be financed by a reserve. You must correspondingly make other adjustments to deal with the situation.

**Participant:** What I gathered from what Dr. Mussa said is that, in one way or another, Egypt is or should be in the process of moving out of the current exchange rate regime. Egypt is not a small country as are the Caribbean countries or Panama. Egypt needs capital inflow, and is actually receiving increasingly more of it than it did in the past. Finally, what is probably needed is a commitment to changing monetary policy and willingness to endogonize and accommodate. The current practice is running into some problems with excessive government spending, etc. Tightening the monetary policy and letting the interest rate go up do not seem to be helping. Some people complain that the private sector is being crowded out and that the economy is slowing down. I wanted you to elaborate, if you would, on how countries similar to Egypt have made the transition, how they actually moved smoothly to the next phase, and what kind of monetary target they moved to?

**Speaker:** In terms of the experience, it is important to recognize that a number of disasters have happened where countries suddenly abandoned exchange rate pegs of long standing during a crisis. The result has been a mess – the exchange rate depreciates massively, wide scale financial failures ensue, and so forth. Egypt is not in a situation where that needs to be the outcome. Reserves are high, and the extent to which there is a problem with the exchange rate level is comparatively modest, not an exceptionally large problem.

I do want to emphasize that any exchange rate and associated policy regime involves commitments and those commitments are sometimes expensive to maintain and involve inconvenience to some parties. Argentina for example, has a very rigid exchange rate peg. There is no doubt that in 1995 and 1999, the policies that were necessary to sustain that peg caused considerable difficulty for private businesses in Argentina. There is also very little doubt that over the past ten years, Argentina has been better served by its exchange rate peg policy than it was by the economic and financial instability that characterized the preceding three decades. The fact that a country is encountering difficulty or some amount of economic pain in sustaining an exchange rate peg does not mean that abandoning the peg is necessarily the right answer. It is a characteristic of exchange rate pegs that they help you some of the time, and cost you at other times.

Egypt, therefore, has to look at the situation not from the perspective of what is convenient today, but what is the best policy regime to serve the economic interest in the longer term. That being said, I think it must be recognized that Egypt's trade pattern is not very heavily focused on the United States and that its economic linkages going forward are probably going to be more strongly with western Europe. Furthermore, inter-regional trade between Egypt and some of its regional trading partners will probably develop to a greater extent than it has so far. Looking to the future, an exchange rate of the medium-term that places somewhat less emphasis on the dollar does make some sense and ought to be examined when the trade regime is under consideration.

I think it is also relevant to consider whether a greater degree of flexibility in the exchange rate may be in your best interest in the long run. The exchange rates between the dollar and the

euro are going to be fluctuating up and down, and there is nothing that Egypt or anyone else can do to stop that from happening. Some flexibility in the exchange rate to react to those disturbances may be a good thing, but one needs to be very careful about that. Monetary policy does need to have a clear anchor if inflation is not to get out of control. Pegging the exchange rate is a very useful way of providing an anchor for monetary policy. Most countries throughout history have found it to be the best anchor for their monetary policy.

The pegged exchange rate worked reasonably well in 1999 in Egypt. It is not something that one wants to throw away all of a sudden without having a viable alternative to go to. What I think would make sense for Egypt, when and if the decision is made to alter the exchange rate regime, is to do so gradually. Perhaps shift the basket of the peg and increase to some extent the degree of flexibility to allow institutions to develop in the market that will enable the exchange rate to move more in response to market forces. Do not move suddenly away from substantial government involvement in setting the exchange rate and certainly not to move, at this time, to suddenly liberalize all forms of capital movement into and out of the Egyptian economy. I think you have a regime that has worked reasonably well despite its present problems. Gradual modification and adjustment of that regime is something that should be carefully considered, but one should avoid a sudden break that would leave people without any system at all or any capacity to understand how they might operate in it.

**List of Attendees**

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- Abdel Aziz M. Hegazy  
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Former Prime Minister*
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- Abdelmegid M. Farrag  
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- Adam Bennett  
*Division Chief, International Monetary Fund (IMF)*
- Adel A. Bishai  
*Professor of Economics, The American University in Cairo (AUC)*
- Ahmed Anwar Sweilam  
*Head Economic Researcher, Al Nasr for Export Co.*
- Ahmed Bardaei  
*Chairman, Banque du Caire*
- Ahmed Eissa  
*Division Manager, Research, CIBC*
- Ahmed Hashem Khedr  
*Director, Documentation's Publishing Center, Institute of National Planning*
- Ahmed Mahmoud Noshy  
*Manager, Economic Research Department, Central Bank of Egypt*
- Ahmed Sadek Foda  
*Managing Director, Investment and Securities Group (ISG)*
- Ahmed Shalaby  
*Journalist, AL Araby Newspaper*
- Aida Rezkalla  
*Representative for Egypt, Bank Credit Commercial de France*
- Al Motaz Bellah Ahmed Mansour  
*Managing Director, Misr Iran Development Bank (MIDB)*
- Ali Lotfy  
*Chairman, Financial Economic Consultancy Center; Former Prime Minister*
- Ali Soliman  
*First Undersecretary, Minister of International Cooperation*
- Amal Amin  
*USAID Cairo Mission*

- Amal Gamal El Din  
*Social Fund for Development*
- Amany El Wassal  
*Trade Researcher, Ministry of Economy*
- Ashraf Abou Alam  
*Manager, Foreign Relations, Export Development Bank*
- Ashraf Mahmoud  
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- Ayman I. Laz  
*Chairman & Managing Director, ASKA Financial Consultants*
- Aziza Samy  
*Head of Economic Department, Al Ahram Weekly*
- Choukry Fouad  
*Advisor to the Minister, Ministry of Foreign Affairs*
- Douglas Young  
*Professor, University of Montana*
- Edmund Saums  
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*Counrty Senior Partner, Price Waterhouse Coopers*
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*Journalist, El Mostakbal Newspaper*
- Fiona Moffit  
*Correspondent, The Economist Intelligence Unit (EIU)*
- Fouad Sultan  
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Maha Galal

*Research Analyst, Ministry of Economy*

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*Project Manager, USAID Cairo Mission*

Mesbah Kotb

*Journalist, Al Ahaly Newspaper*



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- Mohamed Sherif Sharaf  
*General Manager, Egypt Kuwait Holding Co.*
- Mohamed Taymour  
*Chairman, Egyptian Financial Group (EFG-Hermes)*
- Mona Aboul Kheir  
*Economic Researcher, Corporate Finance, Commercial International Investment Co. (CIIC)*
- Mona Kaldas  
*Project Management Specialist, Finance & Investment Officer EG/PF, USAID Cairo Mission*
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## *DISTINGUISHED LECTURE SERIES*

Michael Mussa's extensive research in the field of exchange rate policy has earned him the voice of authority. In his lecture on "Alternative Exchange Rate Regimes," he offers an articulate discussion of the diverse range of regimes in use around the world. While emphasizing the importance of matching a country's regime to its own unique set of characteristics, Dr. Mussa argues that more flexible exchange rate regimes tend to serve better the interests of relatively large countries with healthy banking systems and open capital accounts. He further points out that frequent or swift changes of exchange rate regimes are not advisable.

Not only is Dr. Mussa's presentation relevant to Egypt, but also timely. His perspective comes at a time when the debate on the exchange rate regime has intensified and there is an apparent need for good advice. Surely, this new addition to the Distinguished Lecture Series is an important contribution to this debate.

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