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ECONOMIC OUTLOOK

ECONOMIC TRENDS AND PROSPECTS
IN THE APEC REGION

Economic Committee
Asia-Pacific Economic Cooperation

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FOREWORD

Since its formation at the 1994 APEC Ministerial Meeting in Jakarta, the Economic Committee has pursued a work program aimed at fulfilling the three major objectives established for it: namely to serve as a forum for discussion of economic trends and issues in the region; to support the Ministerial and Leaders' meetings and other APEC fora; and to disseminate information on economic issues and linkages in the region.

In line with these objectives, the Committee has produced an annual economic outlook for the APEC region that provides both a review of economic developments and prospects in the region and its member economies, and addresses topical structural issues bearing on longer-term growth and sustainable economic development.

The 1998 APEC Economic Outlook is the fourth in this series. It is being tabled at a particularly unsettled and difficult time in the region's economic history. The economic and financial crisis that hit the region in mid-1997 has grown beyond all expectations and has had many far-reaching consequences both within the region and globally. The developments in the early phases of the crisis were reflected in the *1997 APEC Economic Outlook*, which also provided a first assessment by APEC member economies of the causes of the crisis and the steps that had to be taken to attenuate it and to restore stability and growth to affected economies.

Subsequently, Ministers and Economic Leaders met in Vancouver where they discussed the issues and endorsed the Manila Framework, which set out agreed measures to address the crisis as it was unfolding at that time. However, events continued to surprise; in 1998, the crisis has deepened and its ripples have spread. As the *1998 APEC Economic Outlook* goes to print, the crisis remains the dominant economic policy issue in the region and beyond. It has challenged our understanding of macroeconomic dynamics, tested the instruments available to our economies individually and collectively, and brought into question long-held tenets about the appropriate regulatory framework for international capital flows. The discussion in this Outlook of the causes of the crisis and the measures that are being taken to address it draws in part on the work within the APEC Finance Ministers process which, pursuant to the meeting of APEC Finance Ministers in Kananaskis, Canada, in May

1998, is tackling some of the tough structural issues in shoring up financial sector prudential regimes and supervisory oversight. It also pulls together the many insights into the crisis that have emerged from the analysis within other major international organizations (including the IMF, the World Bank, the Asian Development Bank and the OECD) and within the broader academic and research community.

While the attention of the economic policy community in the region has been focussed on the urgent task of restoring economic growth and stability, analytic work on the foundations of longer-term growth and economic development continues. In this regard, *The 1998 APEC Economic Outlook* addresses, in its structural chapter, the role of science and technology in supporting economic growth and development. This discussion documents the evolution of thinking concerning the importance of technological innovation in economic growth and sustainable development, reviews the experience of APEC members in promoting the development of innovative capability in their economies, in particular through national innovation systems and supportive economic framework policies, and draws out implications for APEC economic and technical cooperation in this area.

The work program of the Economic Committee has consistently reflected the integrated nature of APEC's two broad agendas of trade and investment liberalization and facilitation (TILF) and economic and technical cooperation (ECOTECH). It is the hope of the Committee that this discussion, together with the analysis in the Committee's study *Towards an Information Society: Developments in APEC* will provide contextual background and analytical support for APEC's key ECOTECH theme in 1998, capacity building through human resource development and science and technology, as well as for APEC's emerging high priority initiative on electronic commerce, its continued work on the Asia Pacific Information Infrastructure and the ongoing TILF agenda, including liberalization under the Information Technology and Telecoms Agreements.

As an institution that has evolved at the dawn of the information age, APEC in general, and the Economic Committee in particular, has pioneered a "virtual" form of operation, relying heavily on the contributions of member economies from capitals to lead individual projects and to develop the papers that serve as the basis of discussion. In this case, particular thanks are due to the team assembled by the State Development Planning Commission of the People's Republic of China which prepared the initial drafts of this paper, led the discussion of the paper in Economic Outlook Task Force sessions and at the special session on the Outlook at the 1998 Economic Outlook Symposium that took place in Xiamen, China, May 16-17, 1998, and developed the final results based on the comments and inputs from member economies. In particular, thanks are due to Professor Xue Lan of the Development Research Academy for the 21st Century, Tsinghua University, who chaired the Economic Outlook Task Force and took particular responsibility for the preparation of the structural chapter of this year's Outlook; and to Xin Ma of the State Development Planning Commission, who took primary responsibility for preparation of the review of regional economic developments and prospects and the compilation of the individual economy reports. Very special thanks are also due to Dan Ciuriak, Assistant to the Economic Committee Chair, for editing the text and to Julie Gould, Director (Program) at the APEC Secretariat, who has taken particular responsibility for seeing this document through to publication within the extraordinarily tight deadlines necessitated by the rapidly changing circumstances that continue to impact on the prospects for the region.

John M. Curtis

Chair
APEC Economic Committee

Ottawa
October 1998

CHAPTER 1

ECONOMIC TRENDS AND PROSPECTS IN THE APEC REGION

1.1 Introduction

In 1998, the Asia Pacific region has experienced a period of turbulence that has few precedents in recent history and that has had significant repercussions throughout the global economy. Its significance is due not only to the depth of the impact on growth in a number of APEC member economies and to the contagion effects that have unsettled emerging markets throughout the world, but also to several singular characteristics – the surprise with which it struck, its source in private sector rather than public sector finances, and the complex set of linkages within economies that have contributed to its propagation. Like previous major economic events, the crisis has led to a fundamental review of basic economic issues – it has prompted a review of the international architecture for capital flows, suggested the need to deepen international surveillance in a global age, and its financial aspects have underscored the need to look closely at private and public sector institutional governance issues.

While the crisis and its consequences have been the dominant issues this year, there have been other noteworthy economic developments in the APEC region in 1998. These include: the continuation of expansion in the USA in the context of the lowest inflation in decades and the decline of unemployment below any prevailing estimate of the non-accelerating inflation rate of unemployment (NAIRU); the remarkable disinflation in China that has brought the rate of price increase to a standstill in 1998 from above 20 percent only three years earlier; and the equally remarkable conjuncture in Japan with historically low interest rates and sustained deflationary pressures.

This chapter looks back over recent economic trends and developments in APEC member economies, considers the prospects for recovery in 1999 and beyond, and reviews in some detail the chronology of the crisis, its causes and its consequences.

1.2 Recent Economic Trends in the APEC Region[1]

In 1997, nominal GDP in the APEC region together with the GDP of the three new members amounted to US$ 16.8 trillion or over 55 percent of global GDP.[2] The value of total trade of these economies amounted to approximately US$ 5.2 trillion or over 54 percent of the world total.

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[1] Unless otherwise specified, growth figures are based on annual averages in the case of annual growth figures and year over year-earlier period calculations in the case of quarterly figures.

[2] The APEC totals for 1998 include figures for Peru, Russia and Vietnam, which officially become APEC members at the 1998 APEC Ministerial. For purposes of calculating growth rates and drawing comparisons, figures for these economies are also included in the base year. Global nominal GDP was on the order of US$ 30 trillion in 1997.

Real economic growth

In 1997, real GDP in the APEC region grew 3.5 percent,[3] slightly lower than the 3.7 percent rate achieved in 1996 and approximately the same as the 3.4 percent rate in 1994. However, real growth trends of APEC member economies were on sharply divergent paths over the course of 1997, a pattern that continued through the first half of 1998 when 9 of the now 21 APEC member economies experienced economic contractions.

The region's largest economy, the United States, has had a strong growth record in recent quarters. U.S. real GDP growth accelerated to 3.9 percent in 1997 (1996: 3.4 percent), marking the 6th consecutive year of expansion. U.S. growth accelerated further to a 5.4 percent annual pace in the first quarter of 1998[4] before moderating to a 1.8 percent pace in the second quarter, leaving U.S. real GDP in the first half approximately 3¾ percent higher than in the corresponding year-earlier period. Strong U.S. growth has been the key factor in supporting overall growth performance in the APEC during this period.

In sharp contrast, economic growth in Japan decelerated in 1997 to 0.8 percent, 3.1 percentage points lower than that in 1996. The downturn of the economy reflected largely the faltering confidence of consumers and business in reaction to the economic turbulence in Asia and the failures of some domestic banks and securities firms. The increase of the consumption tax in April of 1997 caused a surge in household spending in the first quarter of 1997, ahead of the coming into effect of the tax measure in April, and a consequent drop in spending in the second quarter of 1997. The first half of 1998 saw economic activity weaken further resulting in a decline of 3.5 percent in the first quarter on a year-over-year basis and 1.6 percent in the second quarter (which resulted in a decline of 2.6 percent on a year-over-year basis in the first half). The government announced the recent peak was March of 1997. The impact of the fiscal measures announced in April 1998 (over 16 trillion yen or equivalent to about 3 percent of GDP) will be reflected materially in the second half of 1998 and thereafter.[5]

Among the other developed economies in the region, Canada, Australia, and New Zealand all had comparatively strong growth records in 1997. Canada's real growth accelerating sharply to 3.7 percent (1996: 1.2 percent), while Australia's GDP growth slowed slightly to 3.0 percent in 1997 (1996: 3.7 percent). New Zealand's growth also moderated to 2.3 percent (1996: 3.2 percent).

In 1998, trends in these economies have varied. In Canada, strong domestic demand

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[3] This figure includes the 3 new member economies.

[4] Quarter-over-quarter growth, based on seasonally adjusted data, expressed at annual rates.

[5] The fact that public sector construction was negative on a year-over-year basis through mid-1998 reflects the cuts in the public construction budget in the initial budget plan of FY1998 and, technically, a high level of public works spending in the middle quarters of 1997 due to a carryover into FY1997 of public works projects slated for the previous year. The extent of the decline was mitigated by the front-loading of public works spending in the first half of FY1998 pursuant to the April 1998 fiscal measures.

and the close ties to the buoyant U.S. economy cushioned the impact of the Asian crisis and, while the pace of expansion slowed on a quarterly basis, Canadian real GDP was 3.4 percent higher in the first half of 1998 than in the year-earlier period. In Australia, growth in the first half was also very strong (4.9 percent year-over-year in the first quarter and 3.9 percent in the second quarter). This reflects strong domestic demand growth and the movement in the Australian dollar, which provided impetus for Australian exporters to divert their product to more buoyant markets outside Asia. In New Zealand, however, the East Asian downturn, in conjunction with a drought and the lagged effect of previously tight monetary policy, led to a decline in output in the first half of 1998 of 1.3 percent from the second half of 1997, resulting in zero growth in real GDP on a year-over-year basis in this period.

In the newly industrialized economies (NIEs), overall real growth in 1997 slowed only marginally to 6.1 percent (1996: 6.3 percent). Indeed, Chinese Taipei's real growth, buoyed by strong domestic demand, accelerated to 6.8 percent (1996: 5.7 percent); Hong Kong, China's strengthened to 5.3 percent (1996: 4.6 percent); and Singapore's GDP rose to 7.8 percent (1996: 6.9 percent). The one exception was Korea whose growth rate slowed to 5.5 percent in 1997, down 1.6 percentage points from 7.1 percent growth in 1996. The slowdown was concentrated in the fourth quarter when the deepening financial crisis spread into the real side of the Korean economy.

In 1998, however, all of the NIEs have seen their growth performance and prospects more or less deeply affected by the crisis. Korea is in the midst of a deep structural recession, with real GDP down 5.2 percent in the first half of 1998 from the year-earlier period (including a decline of 6.6 percent in the second quarter). Hong Kong, China registered its first negative growth in thirteen years in the first half of 1998 with real GDP declining by around 4 percent from the year-earlier period (including around -5.2 percent in the second quarter). Singapore is now on a slowing trajectory, with year-over-year growth decelerating to 3.8 percent in the first half (including down to 1.6 percent in the second quarter). Chinese Taipei maintained solid growth in the first half at 5.6 percent but, in this economy as well, a slowing trend is apparent with growth decelerating to 5.2 percent in the second quarter over the year-earlier period and leading indicators at mid-year pointing towards a cooler economic climate.

Amongst the developing economies in the region, the contrasts in performance are even more pronounced. In 1997, real GDP in China continued to grow rapidly at 8.8 percent, albeit more slowly than the 9.6 percent realized in 1996. Growth was supported by increasing net exports as domestic demand moderated under the influence of somewhat tightened fiscal and monetary policies and the adjustment effects of economic structural reforms. The first half of 1998 saw growth slow to 7.0 percent (including down to 6.8 percent in the second quarter) before a pick-up to 7.6 percent in the third quarter. Interest rates have been lowered with the continuing decline in inflation, and fiscal stimulus in the form of accelerated infrastructure investment has been announced.

The APEC member developing economies in Southeast Asia were all affected by instability, although the range, the timing and the severity of the impacts varied widely from economy to economy. Thailand, where the crisis started, was the first economy to feel the real-side effects as economic activity contracted sharply in the second half of

1997 with the drying up of liquidity. As a result, real GDP declined on an annual average basis by 0.4 percent in 1997, after a revised gain of 5.5 percent in 1996. In the first part of 1998, economic activity contracted sharply, as reflected in deeply negative growth in industrial production and the extent of import compression.

Indonesia was the last of the major Southeast Asian economies to succumb to the instability and indeed in the early months of the crisis was considered by many observers to be the best positioned of these economies to weather the crisis. In the end, however, it proved to be the hardest hit. Growth in Indonesia slowed sharply from 8 percent in 1996 to 4.6 percent in 1997, with the slowdown concentrated in the 4th quarter. The situation deteriorated in the first half of 1998 with steep quarterly declines in economic activity in both the first two quarters, leaving real GDP in the first half 12.2 percent below its year-earlier level.

In Malaysia, the spillover effects from the currency and financial market turbulence were felt only late in 1997. As a result, the slowdown in annual average growth was quite limited with real GDP expanding by a still robust 7.7 percent for the year as a whole, down only 0.9 percentage points from the 8.6 percent registered in 1996. However the first half of 1998 saw a contraction of economic activity bringing the economy into recession. For the first half of 1998, real GDP was 4.8 percent below its year-earlier level (including -6.8 percent in the second quarter).

The Philippines also experienced only delayed real-side impacts from the currency and financial market instability; annual GDP growth in 1997 came in at a solid 5.2 percent, only 0.6 percent lower than that in 1996. The Philippines economy felt the impact of the Asian crisis more severely during the first half of 1998. However, on a year-over-year basis, real GDP in the first half remained 0.2 percent above its year-earlier level.

Brunei Darussalam, meanwhile, grew by 4 percent in 1997 (1996: 3.5 percent) as good performance in the non-oil sector more than offset a decline in the oil sector. For 1998, low oil prices and fiscal consolidation are expected to result in moderating growth.

Papua New Guinea experienced a difficult year in 1997 under the impact of negative shocks, most importantly a major drought and weakening prices for gold, copper and oil, three of this economy's key exports. Real GDP fell by 4.6 percent for the year. Although rains have relieved the drought in 1998, some of the key agricultural crops are expected to be substantially below 1997 levels. This, along with the damage to the economy from an earthquake-induced tidal wave in early 1998, will dampen growth prospects with current projections for output growth of 2.5 percent.

The spillover effects of the East Asian financial crisis on developing APEC member economies in Latin America over the course of 1997 and the first half of 1998 was limited as serious contagion effects in some neighbouring economies only followed the onset of the Russian crisis in mid-year 1998. In 1997, the government of Chile tightened its policy stance to guard against overheating and real GDP growth moderated slightly to 7.1 percent, 0.3 percentage points lower than the 7.4 percent realized in 1996. Supported by robust investment and export growth, the recovery in Mexico strengthened as real GDP expanded by 7.0 percent in 1997, 1.8 percentage points higher than in 1996. However, both economies have seen moderation in growth in 1998, with Mexico registering 5.5 percent growth in the first half (down to 4.3 percent in the second quarter) and Chile registering 6.3 per cent growth in the first half (down to 5.4 percent in the second quarter). As noted, the growth environment was clouded in the third quarter with the spread of contagion to neighbouring Latin American economies.

APEC's three new member economies – Peru, Russia and Vietnam – face widely varying circumstances. Peru experienced a strong recovery in 1997, with growth accelerating to 7.2 percent (1996: 2.5 percent). However, like most other developing economies, Peru's expansion has slowed in 1998, with real growth falling to 2.1 percent in the first quarter of 1998 and zero for the first half over the corresponding year-earlier period. Russia recorded its first positive real GDP growth since 1991 with an expansion of 0.9 percent in 1997 (1996: -5.0 percent).[6] However, contagion effects have severely impacted on economic performance in 1998. A number of inter-related developments – capital outflows, falling equity prices, higher interest rates and a sharp reduction in liquidity – have resulted in a contraction of real GDP in 1998. In the first half of 1998, GDP decreased by 1.1 percent as compared to the corresponding year-earlier period; by August, real GDP was down 8.2 percent over the year-earlier period. Vietnam, with a far less internationalized economy than other APEC members in Southeast Asia, saw its GDP growth rate in 1997 decrease to 8.8 percent (1996: 9.3 percent). The main repercussions of the crisis have come in the form of exchange rate and commodity price pressures on Vietnam's rice exports. Industrial production remained relatively robust in the first quarter of 1998, growing 13 percent over the year-earlier period, maintaining the pace of 1997 (13.2 percent average annual growth).

Overall, economic growth in the APEC region slowed to just below 2 percent in the first half of 1998, a figure that is boosted considerably by the good performance of the United States, the APEC region's largest economy.

Inflation

The inflation picture in the APEC region over the past year and a half features sharply divergent trends. A few APEC members are currently experiencing, or bordering on, deflation. Others are experiencing sharply higher rates of price increase than in recent years. The factors behind the observed trends vary from economy to economy and no unifying theme or themes clearly emerge(s), a fact that reflects in many ways the complex nature of the inflation phenomenon itself. Moreover, the regional averages – which for the most part showed little movement in 1997 and in the first half of 1998 – tend more to mask than reveal these underlying issues.

Overall, the rate of price increases in the region, as measured by growth in consumer prices in APEC member economies, dropped from 3.2 percent in 1996 to 2.6 percent in 1997. In the developed and newly industrialized economies within APEC, CPI increases in 1997 continued to be relatively low, in several cases under 2 percent. With

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[6] Although it has been suggested that the official GDP figures fail to capture a considerable amount of economic activity and that the Russian economy started to expand as early as 1994.

few exceptions, the rates of increase were lower than in 1996. In most of the Asian member economies that were severely affected by the crisis, the rate of CPI increase slowed on an annual average basis in 1997, notwithstanding the upward trends registered in the year's final months. Meanwhile, some economies (notably Mexico and Russia) made progress in macroeconomic stabilization in 1997 and saw steep reductions in their inflation rates.

These broad trends in the APEC region unfolded in a context of a generally benign global inflation picture with inflation in the developed world remaining in the low 2 percent range, inflation in the developing world falling into the single-digit range and inflation in the economies in transition falling by one-third.[7] Associated with the global disinflationary trend were (a) the decline of commodity prices (in US dollar terms by 6 per cent in the case of fuel and by close to 4 percent in the case of non-fuel commodities); and (b) the decline in inflationary expectations in the developed world (as reflected in the decline in long-term bond yields in many industrialized economies to the levels of the 1960s).[8]

The United States enjoyed a further decline in inflation in 1997, indeed to a 24-year low of 2.3 percent, 0.6 percentage points lower than that in 1996. Price pressures remained remarkably subdued, particularly in light of the decline in the unemployment rate to well below current estimates of the rate at which wage pressures would be expected to be felt.[9] Producer prices were unchanged from 1996 on an annual average basis. Falling import prices associated with the appreciation of the US dollar and the declines in commodity prices were important contributing factors to this inflation performance. In the first 8 months of 1998, the U.S. CPI was, on average, up only 1.6 percent over the year-earlier period.

In Japan, consumer price inflation increased to 1.8 percent in 1997 from 0.1 percent in 1996; however, this was largely due to the increase in the consumption tax from 3 percent to 5 percent in April 1997. Excluding the effect of the tax increase, consumer prices in Japan remained stable in 1997 for the third consecutive year. In contrast to the United States, Japan's domestic price stability has been achieved despite steep increases in import prices since mid-1995 when the yen's trend appreciation against the US dollar was reversed.

Among the other developed economies in the region, Canada, Australia, and New Zealand all had inflation rates below 2 percent. Australia's CPI increase fell to only 0.3 percent in 1997 (1996: 2.6 percent) due to lower underlying inflation and reductions in mortgage interest rates following the easing of monetary policy. Even excluding the effects of falling interest rates and declines in energy and other volatile commodities' prices, Australia had inflation of 1.7 percent (down from 2.7 percent in 1996 on this

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[7] See IMF, World Economic Outlook, May 1998, p. 24

[8] *ibid*., p. 33-34

[9] Estimates of the Non-Accelerating Inflation Rate of Unemployment (NAIRU) in the U.S. generally place it in the mid-5 percent range. While the unemployment rate in the U.S. fell below the 5 percent mark in 1997, hourly earnings in manufacturing rose marginally below 3 percent in 1997.

basis). Similarly, New Zealand's CPI increase fell to 0.8 percent[10] in 1997 (1996: 2.6 percent); and to 1.6 percent excluding interest rate components of the index (1996: 2.3 percent). In both Australia and New Zealand, inflation continued to be low in the first half of 1998 with consumer prices in these economies growing by 0.3 percent and 1.5 percent year-over-year respectively. Canada's CPI growth in 1997 was 1.6 percent, the same as in 1996, despite the sharp increase in economic growth. This good inflation performance continued in the first half of 1998, with the CPI on average 1.0 percent above its year-earlier level despite an easing of the Canadian dollar against its U.S. counterpart.

The NIEs also had good inflation performance in 1997. The rate of increase in the CPI of Chinese Taipei fell to a ten-year low of 0.9 percent in 1997 (1996: 3.1 percent). While the weakening of the NT dollar against the US dollar has put upward pressure on prices in 1998, these pressures have been well contained and the CPI rose by about 1.7 percent in the first half of this year. In Singapore, inflation remained low at 2.0 percent in 1997, although this represented a modest increase from the rate of 1.4 percent in 1996. The modest acceleration is attributed to domestically generated causes including higher prices of transport, private medical fees and administrative charges. In 1998, this uptick was reversed and CPI growth fell to 1.1 percent in the first quarter, and to only 0.3 percent in the second quarter. Growth in consumer prices in Hong Kong, China averaged 5.8 percent in 1997, a moderation from 6.3 percent in 1996. The downward trend continued into 1998: CPI growth decreased to 4.1 percent on average in the first nine months of this year (including to a record low of 2.5 percent in September), reflecting declining import prices due to the relative strength of the currency, the low levels of commodity prices and low inflation in the major supplier economies. In Korea, the rate of increase in the CPI fell slightly to 4.4 percent in 1997 from 4.9 percent in 1996, despite the upward price pressure emanating from the sharp fall in the exchange rate late in the year. However, consumer price growth climbed to 8 percent in the first three quarters of 1998 over the corresponding year-earlier period as the effects of the won's depreciation fed through into final domestic prices.

Amongst the developing economies in the region, inflation performance was on the whole very good in 1997, although the crisis-affected developing economies in Southeast Asia saw an acceleration in inflation in the last months of the year and still steeper increases in the first half of 1998.

China's remarkable disinflationary trend continued in 1997 with the rate of increase in the CPI declining to 2.8 percent from 8.3 percent in 1996 and the high of 24 percent as recently as 1994. This disinflation occurred during a period in which real growth averaged almost 10 percent per annum and following the effective devaluation of the renminbi at the time of unification of exchange rates in 1994. The decline has been attributed partly to the moderate tightening of monetary and fiscal policies over the past few years, as well as partly to the impact on food prices of several good harvests. The disinflation continued in 1998 with the rate of CPI increase falling to a minuscule 0.3

[10] This refers to CPI inflation in the 12 months to December 1997, consistent with the way in which New Zealand's inflation targets are articulated. On an annual average basis, New Zealand's inflation declined from 2.3 percent in 1996 to 1.7 percent in 1997.

percent in the first quarter and turned into absolute declines in prices during the second and third quarters; through the first nine months of the year, the CPI fell by 0.7 percent from the year-earlier period. These latest developments on inflation are generally attributed to the weakness in domestic demand during the first part of 1998.

The APEC member developing economies in Southeast Asia, where the crisis originated, had broadly similar inflation patterns in 1997 and have all seen a rise in inflation in 1998, although the extent of the increase has varied widely.

Thailand, as the first economy to experience an exchange rate depreciation during the crisis, also was the first to feel the impacts on prices. Prior to the crisis, inflation had slowed sharply, falling from the 8 percent range in 1995 to the 4 percent range in mid-1997; however, with the decline in the baht, the CPI bounced up late in the year to come in at 5.6 percent on an annual average basis (1996: 5.9 percent). CPI growth moved higher during the first half of 1998, averaging 9.7 percent over the corresponding year-earlier period and reaching as high as 10.7 percent at mid-year.[11] However, price growth decelerated to the 7 percent range in the third quarter.

Indonesia also was on a positive track in reducing inflation, with the rate of increase in the CPI falling to the 5 percent range in mid-1997, when the crisis hit. As the rupiah depreciated, the CPI moved higher in the 4th quarter of 1997 to record an annual CPI growth of 11.05 percent, compared to 6.5 percent in 1996. However, as the crisis intensified in the first half of 1998, the rate of inflation accelerated sharply, climbing to the 50 percent range at mid-year and to a cumulative 75.4 percent over the first 9 months of 1998. The impact on the population of the higher inflation has been exacerbated by the fact that the price increases for staple foods have risen even faster than the average.

In Malaysia, the rate of increase in the CPI eased to 2.7 percent in 1997 (1996: 3.5 percent), with only a muted acceleration in the 4th quarter following the depreciation of the ringitt. In 1998, the effects of the depreciation have worked their way through more fully into prices and the CPI was up 5.0 percent year-over-year in the first half, and moderately higher to an average year-over-year rate of 5.7 percent in July and August.

The Philippines also had seen inflation slow considerably in 1997, with the rate of CPI increase down to 4.6 percent over the first 8 months of the year compared to the annual average inflation rate of 8.4 percent in 1996. The peso depreciation pushed CPI growth up at the end of the year but the 1997 annual average inflation rate of 5.1 percent was still the lowest in 10 years. Inflation moved somewhat higher to 7 percent in the first quarter of 1998. The pleasant surprise reflected lower-than-expected food and oil prices. However, CPI growth jumped to 9.0 percent in the second quarter, including to a high of 9.9 percent in June, due to the impact on agricultural production from the El Nino-induced drought conditions that prevailed early in the year. In the third quarter, inflation was 9.6 percent, but with signs of deceleration from the June peak. Through the first three quarters, the Philippines averaged 8.8 percent inflation on a year-over-year basis, comfortably below the Philippines government forecast of 9.25 - 9.75 percent for the year.

[11] The figure cited is for June 1998 compared to the year-earlier period.

Brunei Darussalam experienced low inflation in 1997 with the CPI increasing only 1.7 percent (1996: 2 percent). With the Brunei dollar pegged to the Singapore dollar, the impact of imported inflation will likely be contained in 1998.

Papua New Guinea saw inflation fall to only 3.9 percent in 1997, well below the 11.6 percent registered in 1996 and the 7 percent that had been forecast. However, the depreciation of the kina in the first half of 1998 will lead to higher rates of price increase this year, with consumer good prices increasing by 5.6 percent over the first half of the year.

For the developing APEC member economies in Latin America, trends have been different. In Chile, the appreciation of the peso in 1997 contributed to a decline in the rate of increase in the CPI to 6.0 percent, from 6.6 percent in 1996.[12] CPI growth slowed further to 5.4 percent in the first half of 1998 over the corresponding year-earlier period and further to 5.2 percent in the third quarter (including to 4.8 percent in September). The Government target for year-end 1998 is 4.5 percent. Mexico's CPI growth, meanwhile, fell to 15.7 percent, close to the original target of 15.0 percent, and 12 percentage points lower than the 1996 rate, as the Mexican economy continued its recovery and stabilization following the 1994 recession.[13] The downward trend continued in the first half of 1998 with CPI growth falling to 15.2 percent over the year-earlier period before picking up somewhat to 15.6 percent in the third quarter.

APEC's three new member economies all made good progress in reducing inflation in 1997. Peru saw inflation fall to 6.5 percent in 1997 from 11.2 percent a year earlier.[14] The rate of price increase however picked up to 7.7 percent in the first half of 1998. Russia made major strides towards price stability in 1997, reducing the rate of growth in consumer prices to 14.6 percent from 47.6 percent in 1996. These gains were maintained for the first half of 1998 as the rate of CPI growth fell to 6.4 percent on a year-over-year basis in July 1998. However, with the instability that hit Russia's currency, equity and financial markets in the third quarter, there has been renewed severe volatility in prices, reversing the gains that had been made. Vietnam also reduced its inflation rate in 1997 to 3.6 percent from 4.5 percent in 1996, continuing the longer-term trend towards price stability since the early 1990s.

Unemployment

In 1997, the average unemployment rate for the APEC region was 4 percent, 0.2

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[12] These figures are for the 12 months ending in December in the respective years, consistent with the way in which Chile's inflation targets are framed. The annual average inflation rates for 1996 and 1997 were 7.4 and 6.1 percent respectively. Source: IMF, International Financial Statistics, September 1998

[13] These figures are for the 12 months ending in December in the respective years, consistent with the way in which Mexico's inflation targets are framed. The annual average inflation rates for 1996 and 1997 were 34.4 and 20.6 percent respectively. Source: IMF, International Financial Statistics, September 1998

[14] These figures are for the 12 months ending in December in the respective years, consistent with the way in which Peru's inflation targets are framed. The annual average inflation rates for 1996 and 1997 were 11.6 and 8.5 percent respectively. Source: IMF, International Financial Statistics, September 1998.

percentage point higher than that in 1996. Unemployment rates in the developed economies continued to maintain their downward trend in 1997. In contrast, most Asian APEC member economies witnessed a moderate rise in unemployment rates, reflecting the progressively greater spillover effect from the financial crisis onto the level of economic activity during the latter part of the year.

In the United States, the unemployment rate fell to its lowest point in recent decades averaging 4.9 percent in 1997; at the same time the employment/population ratio reached an all-time high of over 64 percent, reflecting the economy's strong job creation record. The U.S. unemployment rate continued to decline in the first half of 1998, reaching as low as 4.3 percent during the second quarter of 1998. The job market weakened in the third quarter, reflecting in part the transient effects of the prolonged General Motors strike.

In Japan, the unemployment rate edged up to 3.4 percent in 1997 and, reflecting the diminished demand in the labour market in the recessionary economic climate, moved still higher during the early months of 1998 to reach a postwar high of 4.3 percent in June.

In the other developed APEC member economies, unemployment rate trends reflected the relative strength of economic growth. In Canada, the unemployment rate fell to 9.2 percent in 1997, 0.5 percent lower than that of 1996, and continued to decline in the 1998, falling to 8.3 percent in the August-September period. Employment growth in Australia slowed down in the first part of 1997 but, reflecting strengthening economic growth, picked up towards the end of 1997, resulting in an annual unemployment rate of 8.6 percent, unchanged from 1996. Australia enjoyed a decline in the unemployment rate to 8.2 percent in the first half of 1998. In contrast, New Zealand, which had seen unemployment fall to a recent low in 1996, experienced rising unemployment in the course of 1997 as economic growth slowed below potential. The unemployment rate averaged 6.7 percent for the year in 1997 (1996: 6.0 percent) and continued to rise in the first half of 1998 to reach 7.7 percent, as economic activity declined.

A similar picture emerges in the labour markets of the NIEs where the unemployment rate trends mirror the real growth picture. Korea, the economy within this group hardest hit by the crisis, saw its unemployment rate rise to 2.6 percent in 1997 (1996: 2.0 percent). Following enactment of new labour market legislation in 1998 to facilitate economic restructuring, unemployment has risen much more steeply to reach 7 percent at mid-year. In the other NIEs, unemployment rates in 1997 were stable or falling, reflecting the acceleration in growth in these economies last year. In 1998, trends have varied. Hong Kong, China, after seeing the unemployment rate fall to 2.2 percent in 1997 (1996: 2.8 percent) experienced an increase to 3.5 percent in the first quarter of 1998 and still higher to 5 percent in the third quarter. Singapore and Chinese Taipei (with unemployment rates of 1.8 percent and 2.7 percent respectively in 1997) had stable labour market situations in the first half of 1998 (with unemployment rates of 2.3 percent in Singapore and 2.4 percent in Chinese Taipei).

Amongst the developing economies in the region, labour market conditions have materially worsened as recessions in some economies and slowing growth in others have resulted in both job losses and a reduced ability to absorb new entrants from still rapidly growing working-age populations. In the Southeast Asian economies in particular, concerns have shifted from issues such as skills shortages that dominated agendas in the period of rapid growth to the issues of job creation, improving social safety nets to alleviate hardships during economic restructuring, and in some cases coping with the reversal of internal rural-urban migration flows.

In China, unemployment has been on an upward trend for some time due to the restructuring of state-owned enterprises. The urban unemployment rate rose to 3.1 percent in 1997, slightly higher than that in 1996. This upward trend continued during the first half of 1998 with the slowdown in exports an additional factor.

Amongst the developing APEC member economies in Southeast Asia, unemployment is now growing rapidly, although the extent varies from economy to economy, reflecting the differences in timing of spillover of instability in the financial side of the economy to real economic activity.

The unemployment rate of Thailand increased to 3.5 percent in 1997, up from 2.0 percent in 1996 as the result of the economic downturn in the second half of the year. In Indonesia as well unemployment rose in 1997 to 6 percent, up from 4.9 percent in 1996. By contrast, in Malaysia and the Philippines, there was little movement in the unemployment rate in 1997; Malaysia saw the rate edge up to 2.7 (1996: 2.5 percent) while the Philippines experienced a slight rise to 8.7 percent (1996: 8.6 percent). However, with the deepening of the real-side impact of the crisis in 1998, unemployment is expected to increase to 4.9 percent in Malaysia. The Philippines saw its unemployment rate rise to 13.3 percent in the first quarter and 8.9 percent in the second quarter of this year.

In the Latin American APEC member economies, the unemployment situation has been improving, with Chile reducing its unemployment rate to 6.1 percent in 1997, 0.2 percentage points lower than that in 1996; and Mexico lowering its unemployment rate to 3.2 percent, a 2.3 percentage point drop compared with that in 1996. In both economies, labour market conditions remained stable in the first half of 1998.

In Peru, unemployment in Lima Metropolitana area, influenced by population growth, rose from a rate of 7.2 percent in 1996 (third quarter) to 8.6 percent in 1997. In Russia, the situation on the labour market in 1997 was improved. The official registered unemployment rate fell to 2.75 percent in 1997 from 3.4 percent in 1996. In the first 7 months of 1998, the decreasing trend in the number of officially registered unemployed continued in Russia, lowering the unemployment rate to 2.4 percent. The renewed instability in the financial sector will undoubtedly have spillover effects on unemployment in this economy in the second half of 1998. In Vietnam, the unemployment rate in the cities and towns in 1998 was 8 to 9 percent, higher than the 6 percent recorded in 1996.

Current account balances and capital flows

While the Asian economic and financial crisis had many and complex roots, one of these was growing concern about persistent large current account deficits in some economies; moreover, one of the first manifestations of the crisis – and indeed a trigger for subsequent events in other areas of the economy – was a shift in the direction of capital flows. The shifts in the external balances of APEC member economies over the course of 1997 and 1998 have had important implications for all members. The ebbing of capital from emerging markets contributed at times to the bidding up of equity and bond prices in "safe haven" economies, while draining liquidity from emerging markets. As the real-side impacts of the crisis deepened in 1998, the regional current account picture has evolved rapidly. Those economies that have sustained growth have experienced widening deficits or shrinking surpluses while those in recession or experiencing slow growth have witnessed narrowing deficits or widening surpluses. In the hardest-hit economies, dramatic shifts in current accounts from deficit to surplus have occurred, primarily as a result of import compression.

In 1997, the APEC region as a whole had a net current account deficit approaching US$115 billion or 0.7 percent of the combined GDP of member economies. This represented a US$5 billion decrease from 1996. While the region as a whole was a net importer of capital from the rest of the world, of even greater significance was the continuation of imbalances within the region.

In terms of individual economies, the United States continued to have the region's largest current account deficit in absolute terms, although a relatively modest one as a percentage of GDP. In 1997, the deficit grew to US$ 155 billion, accounting for 1.9 percent of its GDP (1996: -1.8 percent). The deficit widened in the first two quarters of 1998, to 2.3 percent and 2.7 percent of GDP respectively, in large measure due to the decline in exports of goods and services to Asia and sustained growth in imports from this region. On the capital account, the U.S. continued to be both an important source of, and destination for, foreign direct investment (FDI). In 1997, the FDI outflow from the USA rose to US$119 billion, 28 percent higher than 1996, while FDI inflow to the USA amounted to US$108 billion in 1997. These developments were balanced by significant net inflows of portfolio investment.

Japan, meanwhile, continued to have the largest current account surplus in the region in absolute terms, although also quite modest as a percentage of GDP. In 1997, the surplus increased for the first time since 1994, reflecting a combination of the depreciation of the yen, and the slowing of domestic growth in a context of continued strong expansion of the world economy. Japan's surplus reached US $94.5 billion in 1997, accounting for 2.3 percent of Japan's GDP (1996: 1.4 percent). The surplus continued to increase in the first two quarters of 1998, reaching 2.9 percent and 3.1 percent of Japan's GDP respectively, on a seasonally adjusted basis. On the capital account, Japan's FDI outflow increased in 1997 to US$ 54.6 billion, the fourth consecutive increase since 1994, while FDI inflows declined slightly to US$5 billion. As a result, Japan remained the largest net capital export economy in the world. Japan was also a significant net supplier of portfolio capital.

The other developed economies in the region all showed deficits in 1997. In Canada's case, the deficit of 1.5 percent of GDP represented a shift from a surplus of 0.6 percent in 1996; this was, in significant measure, due to the decline in commodity prices which impacted on Canada's terms of trade, as well as the weaker demand from Asian trading partners. Australia reduced its current account deficit to 3.2 percent of GDP (1996: -4.0 percent), although this was in large measure due to gold sales by the Central Bank. New Zealand, meanwhile, experienced a significant widening of its current account deficit to 7.7 percent of GDP (1996: -3.9 percent), notwithstanding an increase in its surplus on merchandise trade. A combination of a widening of the deficit on the services account and negative swings on net transfers and net investment income accounted for this development.

The deficits of Canada and Australia widened further in the first half of 1998, reflecting in part the comparative strength of domestic demand in these economies vis-à-vis many of their trading partners. In New Zealand, however, the current account deficit narrowed in the first half of 1998 (from 7.7 percent in the year to December 1997 to 6.7 percent in the year to June 1998), largely reflecting weakness in the domestic economy.

Amongst the NIEs, the two economies which have consistently registered current account surpluses, Singapore and Chinese Taipei, both saw their surpluses shrink marginally in 1997; in Singapore's case, the surplus fell in 1997 to 15.4 percent of GDP (1996: 15.9 percent), while in the case of Chinese Taipei, it dropped to 2.7 percent of GDP (1996: 4.0 percent). Hong Kong, China's deficit increased to 3.5 percent of GDP from -1.4 percent in 1996.[15] To a considerable extent, the widened gap in 1997 was attributable to a larger intake of material inputs and capital goods for production and business expansion, which led to a larger visible trade deficit. The most significant developments within this group of economies were in respect of Korea's external balances. Reflecting in large part the compression of imports late in the year, Korea reduced its current account deficit to 1.9 percent of GDP in 1997 from 4.9 percent in 1996. In the first half of 1998, the deficit of Korea has shifted to a surplus of 7.3 percent of GDP.

Singapore continued to be an important net source of direct investment although investment outflow declined sharply in 1997 to 5.5 percent of GDP (1996: 10.1 percent). Chinese Taipei also experienced a slight decline in net private capital outflow in 1997. Hong Kong, China has in recent years joined Singapore and Chinese Taipei as a major source of direct investment capital in the past several years, notwithstanding its position as an overall net importer of capital. There are no official data on Hong Kong, China's outward FDI but based on statistics released by some of the host economies, Hong Kong, China is known to have invested heavily in East Asia, particularly in the mainland of China. As of the end of June 1998, the cumulative value of Hong Kong, China's realized direct investment in China amounted to US$ 130 billion, accounting for 54 percent of total FDI in China. Korea's net capital inflow dropped substantially in 1997 to 2.8 percent of GDP as compared with 4.9 percent in 1996. For the first half of 1998, the total amount of foreign investment reached US$ 2.46 billion. This was an important development as it helped offset the continued large net outflow of portfolio capital as Korea continues to work out its external debt situation.

China's current account surplus in 1997 rose to US$ 29.7 billion, or 3.3 percent of GDP, (1996: US$ 7.2 billion or 0.88 percent of GDP). The rapid expansion of net

[15] These data cover merchandise trade and non-factor services.

exports was a key factor, as the trade surplus expanded to US$40.3 billion or 4.5 percent of total GDP, up from 1.5 percent in 1996. Growth in trade has slowed sharply in 1998 with merchandise exports up 3.9 percent in the first 9 months of the year over the corresponding year-earlier period (compared to annual growth of almost 21 percent in 1997); and merchandise import growth down to 0.4 percent over the first 9 months (1996 annual growth: 2.5 percent). The merchandise trade surplus for the first 9 months of 1998 was US$ 35.3 billion, ahead of the pace in 1997.

Amongst the Southeast Asian economies most affected by the crisis, all have seen significant current account swings in the past year and a half.

Thailand has effected the largest swing on its current account balance, moving from a deficit of 7.9 percent in 1996 to a deficit of 2.0 percent of GDP in 1997 and into a surplus of 6.9 percent of GDP in the first half of 1998. While initially this occurred largely because of compression of imports, the improvement of the external account has since been supported by strengthening export volumes.

Indonesia also reduced its current account deficit in 1997; the deficit declined to 2.7 percent of GDP from 3.4 percent in 1996. The steep reduction in imports in the first half of 1998 has resulted in the emergence of a very substantial current account surplus.

Malaysia saw little change in its external balances in 1997 but has also moved from deficit to surplus with the contraction of domestic economic activity in the first half of 1998.

The Philippines, after seeing its current account deficit increase marginally to 5.2 percent of GDP in 1997 (1996: -4.7 percent), reduced it to a low of -0.1 percent in the first half of 1998.

Brunei Darussalam continued to have a surplus on the current account in 1997 on the order of 50 percent of GDP.

Papua New Guinea, which has tended to run large current account surpluses witnessed a swing into a deficit estimated at about 2.5 percent of GDP in 1997. This reflected a series of adverse shocks including a drought and the decline in the prices of key exports.

As regards the Latin American APEC member economies, in Chile, the current account experienced a deficit in 1997 of US$ 4.1 billion (5.3 percent of GDP), including a deficit on merchandise trade of US$ 1.3 billion. Improvements in the terms of trade, which boosted export values in the first half of 1997, had resulted in a merchandise trade surplus in the first half of the year. However, the subsequent policy shift in February 1997, with fiscal policy becoming more expansionary to support expansion and monetary policy tightening to stabilize the exchange rate, resulted in an increase in imports and the shift of the merchandise trade balance into deficit. In the first half of 1998, the merchandise trade balance registered a deficit of US$ 1.1 billion, reflecting in part adverse commodity price movements. In Mexico, meanwhile, after two years of moderate deficits, the current account deficit rose in 1997 to US$7.3 billion or 1.8 percent of GDP. This was largely due to a decline in the surplus on merchandise trade to US$0.6 billion, which reflected the impact of falling oil prices on exports as well as high domestic economic growth which induced rapid import growth. Through the first 8 months of 1998, Mexico's exports were up 8 percent over the corresponding year-earlier period while imports were up 17.5 percent. The current account deficit is now projected by the IMF to reach 3.4 percent of GDP in 1998.

Among the new APEC member economies, Peru lowered its deficit on the current account to 5.2 percent of GDP from 5.9 percent of GDP in 1996. However, in the first half of 1998, this widened to 6.9 percent of GDP. The deficit and has been financed largely by foreign direct investment inflows associated with the mining sector and also privatization initiatives. In Russia, the current account surplus narrowed to 0.6 percent of GDP in 1997 from 2.8 percent of GDP in 1996. This was mainly due to a decline in the merchandise trade surplus to US$15.6 billion in 1997 against US$21.4 billion in 1996. In the first half of 1998, Russia's trade surplus declined further to US$ 0.5 billion, as the fall in world oil prices impacted adversely on its terms of trade (fuel and energy goods export account for approximately 43 percent of the total volume of Russian exports). Russia saw inward FDI almost double in 1997 to US$ 33.9 billion. The first half of 1998, however, witnessed a sharp reduction of FDI inflows: Russia attracted US$1.5 billion FDI, with the most active investors being Germany, USA and France. Vietnam reduced its current account deficit to 6.4 percent of GDP[16] (1996: 9.8 percent), in part due to slower import growth as the dong depreciated, as well as to reduced capital imports with a slowing of investment.

1.3 Economic Prospects for the APEC Region, 1998-2000[17]

The unsettled state of the global economic environment has added to the uncertainties surrounding the economic prospects for the APEC region in the near future. World economic growth in 1998 is now projected by the IMF to slow from the 4 percent pace of recent years to about 2 percent. Over the near term, inflation will likely remain low and labour market conditions stable in the developed economies outside Asia, but trending upwards in the developing economies and newly industrialized economies that have been hit hardest by the crisis as well as in emerging markets elsewhere that have been affected by contagion. World trade is expected to pick up over the near term following the slowdown that has characterized late 1997 and much of 1998.

Within the APEC region, economic growth is estimated to have slowed to a little less than 2 percent in the first half of 1998 and will in all likelihood average about 1½ percent for the year as a whole. Since turning points in economic cycles cannot be exactly anticipated, the outlook for 1999 is subject to particular uncertainty but there are grounds for cautious optimism that some degree of improvement will be realized. Taking into account the varying stages of the cycle of member economies across the

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[16] Excluding official transfers.

[17] Forecasts and projections presented in this section are drawn from either official sources or from the IMF's, World Economic Outlook, September, 1998, sourced from the IMF's website.

region, the growth trough will likely be in the second half of 1998, followed by a pickup of growth to the 2 percent range in 1999 and a return to stronger growth by 2000. This reflects the following considerations.

The United States, which accounts for almost 48 percent of the regional economy, exerts a very strong influence on overall regional growth trends. Following the strong performance in the first half of 1998 that left U.S. real GDP 3¾ percent higher than in the corresponding year-earlier period, U.S. growth is generally expected to moderate to the 2 to 2½ percent range in the second half of 1998 and over the period to 2000. The IMF now projects 3.5 percent for 1998 as a whole, followed by 2.0 percent in 1999.

Japan, which accounts for almost 25 percent of the regional economy, experienced negative growth in the first half of 1998 (-2.6 percent on a year-over-year basis). However, in addition to the front-end-loaded public works spending, a fiscal stimulus package (over 16 trillion yen, or equivalent to 3 percent of its GDP) was announced by the government in April and a supplementary budget to implement the package was approved in June. Fiscal spending and tax cuts contained in the package are expected to have a substantial impact on economic activity beginning in the second half of 1998, cushioning the downturn and significantly reducing drag on the regional economy. Further fiscal stimulus, announced by the government in August 1998, including more than 10 trillion yen (2 percent of GDP) of total projects and more than 6 trillion yen (1.2 percent of GDP) in tax cuts will provide impetus for recovery. The restoration of sustained growth will, of course, depend upon implementation of structural reforms and the working out of the balance sheet problems in the banking sector. According to the IMF's most recent forecast, Japan's economy is expected to contract by 2.5 percent in calendar year 1998 and to register modestly positive growth by 0.5 percent in 1999.

Australia and Canada, which together account for almost 6 percent of the regional economy, both registered strong year-over-year growth rates in the first half of 1998. Based on solid fundamentals (low inflation, restored fiscal balance, low longer-term interest rates and competitive exchange rate positions), they are well situated to continue moderate expansion. For Australia, the authorities project solid growth of 3.5 percent in 1998; by comparison, the IMF also projects 3.5 percent in 1998 and 2.0 percent in 1999. For Canada, the private sector consensus currently calls for 2.9 percent growth in 1998 followed by 2.3 percent in 1999; by comparison, the IMF projects 3.0 percent in 1998 and 2.5 percent in 1999. In New Zealand, as noted, the combination of the East Asian downturn, a drought and the lagged effect of previously tight monetary policy, saw the economy contract by 1.3 percent in the first half of 1998 from the second half of 1997. However, subdued inflationary pressures, fiscal stimulus including tax reductions, and a competitive exchange rate should support economic activity and facilitate economic adjustment. Growth in New Zealand is projected to turn positive in 1999 and to accelerate to above-trend in 2000 and beyond. For 1999, the IMF now projects growth of 1.7 percent, following a decline of 0.5 percent in 1998.

Amongst the APEC NIEs, which together also account for about 6 percent of the regional economy, the near-term prospects reflect the respective positions of these economies in the economic cycle. Chinese Taipei, coming off solid 5.6 percent growth in the first half, is on a moderating trend but is expected by the authorities to realize growth of about 5 to 5½ percent for the year as whole and to maintain this same pace in 1999 as well (by comparison, the IMF's most recent forecast has growth slowing to 4 percent in 1998 and to 3.9 percent in 1999). Singapore saw growth decelerate to 3.8 percent in the first half on a year-over-year basis. For the year as a whole, growth is projected to slow to between 0.5 and 1.5 percent by the authorities (by comparison, the IMF's most recent forecast has growth slowing to 0 percent in 1998 and to 0.2 percent in 1999). Both economies have sound macroeconomic and financial fundamentals and expectations are for strengthening growth in 2000 and beyond. Hong Kong, China, coming off a decline in real GDP of around 4 percent in the first half of 1998, has announced special relief measures to ease the tight liquidity situation and to stabilize the property sector. The authorities project that the contraction will be contained at around 4 percent for the year as a whole, before resuming growth at an annual average of 4 percent over the period 1999-2002 authorities (by comparison, the IMF's most recent forecast has negative growth of 5 percent in 1998 followed by 0 percent in 1999). In Korea, coming off a decline of 5.2 percent in the first half of 1998, the authorities expect to contain the contraction to approximately 5 percent for the year as a whole. Korea has seen strong growth in export volumes, a swing to large surpluses on merchandise trade and the current account, substantially rebuilt foreign exchange reserves and a measure of stability in the won which has traded for the most part in the 1,300 to 1,400 range vis-à-vis the U.S. dollar since the second quarter of 1998. For Korea, the IMF now projects a decline of 7.0 percent in 1998, and a further decline of 1.0 percent in 1999. The combined real GDP of these four economies declined by approximately 1 percent in the first half of 1998 and is projected to contract by about 2½ percent for 1998 as a whole. In 1999, this is now projected to swing into positive growth on the order of 1 percent

China, whose economy accounts for about 5½ percent of the regional economy, saw growth slow to a 7.2 percent pace in the first nine months of 1998. China's strong external balances and rising foreign reserves do not suggest impairment of its competitive position internationally from the real exchange rate appreciation experienced vis-a-vis the crisis-hit economies of Southeast Asia. The stimulative measures announced to respond to the domestic concerns of rising unemployment and declining price levels, which include further cuts in interest rates and increased spending on infrastructure, are expected to support more rapid expansion in the balance of 1998. The authorities project growth for 1998 as a whole at 8.0 percent followed by 7 to 8 percent growth over the period 1999-2000 (by comparison, the IMF's most recent forecast has growth slowing to 5.5 percent in 1998).

Amongst the developing economies of Southeast Asia, growth projections for Indonesia, Malaysia, the Philippines and Thailand have been revised down significantly, as the full depth of the crisis has become clear. Thailand is now projected by the authorities to contract by 7 percent in 1998; by comparison the IMF now forecasts a decline of 8 percent in 1998. However, inflation is now likely to be contained to single-digit levels, export volumes have been increasing rapidly and there are encouraging signs that manufacturing activity started to pick up at mid-year. Indonesia, after a decline of 12.2 percent in the first half of 1998, has seen a further decline in economic activity as the year progressed. As a result, the growth projection for 1998 as a whole is now on the order of -13 to -14 percent (by comparison, the IMF projects a decline of 15 percent). The economy is seen as passing through the trough in the cycle early in 1999 and returning to positive growth in 2000. The rise in inflation to an anticipated cumulative 90-100 percent creates a more significant stabilization issue for Indonesia than will be faced by other economies in this region. Malaysia experienced a decline of 4.8 percent in the first half, including -6.8 percent in the second quarter. Growth for 1998 as a whole is expected by the authorities to be between -4 percent and -5 percent (by comparison, the IMF's latest forecast projects a decline of 6.4 percent in 1998). The rapidity of recovery in 1999 and beyond will depend on the economy's adjustment to the new financial framework, including capital controls and a fixed exchange rate, and the resolution of the banking system balance sheet problems. On the positive side, inflation has been well contained and export growth has been very strong. In the Philippines, the pace of expansion slowed from the 5.2 percent range in 1997 to a marginal gain of 0.2 percent in the first half of 1998, which included a 1.2 percent year-over-year decline in the second quarter. The authorities project growth for the year as a whole to be 1 percent (by comparison, the IMF's latest forecast projects a modest decline of 0.6 percent in 1998). On the positive side, the rise in inflation has been contained and export performance has been robust, establishing a solid basis for resumption of positive growth in 1999 and beyond.

For the four economies as a group, the contraction in 1998 is likely to approach 7 percent. These economies are expected to make headway in stabilization in 1999 and to return to stronger growth in 2000. Given the fact that these economies together account for less than 3 percent of the regional economy, the impact on regional economic performance of these growth trends is comparatively small in an arithmetic sense. However, as these economies account for approximately 1/6 of the population of the region, the significance of the outcomes in human terms is magnified. Moreover, the contribution that a restoration of stability and growth in these economies would make in improving the tone of international markets cannot be understated.

The uncertainties in the outlook for these economies remain large, given the still turbulent international financial environment which emerging markets everywhere now face. While the problems in the financial and corporate sectors of the hardest-hit economies have proved to be more extensive and serious than expected, progressive macroeconomic stabilization and implementation of microeconomic and financial reform policies can put in motion a cycle of mutually reinforcing economic forces that will facilitate these efforts. With the crisis now in its sixth quarter for this group of economies, there have been some broad successes to build on, including in controlling inflation, expanding export volumes,[18] reducing or reversing current account deficits and reducing to some extent the volatility in exchange markets. It is important to note that, given the importance of intra-regional economic relations, economic prospects for the crisis-affected economies are inter-dependent. Recoveries will tend to be mutually reinforcing for the same reason that the downturns have been mutually damaging. Accordingly, the commitment to open markets remains a key element in the restoration of economic health to this region.

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[18] Due to price declines, there has been little if any growth in export receipts in US dollar terms, notwithstanding the substantial increases in export volumes.

As regards the Latin American developing APEC member economies, economic growth prospects have been revised down due to external factors. In Mexico, the government announced three fiscal adjustments in January, March and July to offset the effects of the Asian crisis and lower oil prices on the budget in order to meet its fiscal target for year. As well, interest rates have been raised to counter the renewed exchange market pressures on emerging markets in the third quarter following Russia's financial crisis. Coming off 5.5 percent growth in the first half, Mexico's economy is projected to slow in the second half. The authorities target 4.5 percent growth for 1998 as a whole; by comparison, the IMF also forecasts 4.5 percent. Projected growth has also been marked down in Chile, to reflect its comparatively large export exposure to Asia and the tightening of credit policy to counter external pressures. Coming off 6.3 percent growth in the first half, Chile's economy is projected to slow to the 3.7 percent range in the second half; the authorities forecast 5.0 percent growth for 1998 as a whole (by comparison, the IMF's latest forecast has Chilean growth at 4.5 percent in 1998).

In Brunei Darussalam, GDP growth in 1998 is expected to slow to 1.8 percent, partly because of the fiscal consolidation measures instituted by the government in 1998 and the impact of low oil prices on this major Brunei export and revenue sector, and to pick up gradually in the ensuing years.

Though, Papua New Guinea is projected to record output growth of 2.5 percent in 1998 this is predominently driven by the mineral and petroleum sectors masking weaknesses in other sectors, particularly the agriculture sector which has yet to recover from last year's drought. Although rains relieved the drought in 1998, the main agricultural crops of coffee, cocoa, palm oil and copra are expected to be well below 1997 levels, indicating a further decline in agricultural output this year.

In Peru, coming off a slowdown in growth to the early part of 1998, which was in part due to the impact of El Nino on fishing and agriculture output during this period, economic growth is projected by the authorities to reach 3 percent for the year as whole (the same as forecast by the IMF). This reflects in part the impact of the plunge in world copper prices on this key Peruvian industry. In 1999, the authorities forecast 6 percent growth.

In Russia, the depreciation of the ruble and the domestic financial crisis have significantly reduced growth prospects while increasing uncertainty. Growth was slightly negative in the first half of 1998 over the corresponding year-earlier period. The IMF now projects a decline of 6.0 percent in 1998. Beyond that, prospects will depend on the development of Russian financial markets and how fast, effective and credible policy responses will be.

Finally, in Vietnam, moderate growth has been sustained in 1998 despite the regional turbulence. Real GDP is now projected to expand by 6 percent for the year as a whole and to pick up to the 6 to 7 percent range in 1999 and beyond. By comparison, the IMF forecasts 4.0 percent growth in 1998.

As noted, the uncertainties surrounding the economic outlook in the Asia Pacific region and indeed in the broader global economy are particularly great at this time. There are important risks bearing on the outlook both from within the region and from developments in the rest of the world. Viewed in isolation, any one of the risks, though serious, may not be sufficient to raise concerns about global repercussions. It is the inter-related nature of these risks, with the scope for contagion and chain reactions – or, by the same token, for mutually positive reinforcement from good outcomes – which warrants the attention of policy-makers around the world. The recovery of economic growth in the APEC region as a whole in the short- to medium-term will depend in part on how some of the main uncertainties are resolved.

1. The situation in Japan: Given the importance of Japan as a market for and financier of the East Asian economies that have been most affected in the crisis, and in view of the spillover effects on the region that have been seen over the course of the crisis during periods of weakness in the yen or when concerns have arisen about fragility in Japan's financial system, reinvigoration of domestic demand in Japan and resolution of its banking system issues would have a particularly salutary effect on East Asian growth prospects. In this context, the Japanese government has announced substantial fiscal stimulus packages to take effect during 1998-1999

2. The financial crisis in Russia: Early stabilization is Russia is important both for growth prospects in this important economy and to contain the ripple effects on other emerging markets and global financial markets.

3. Exchange rate policy in China: Stability of the renmimbi, supported by China's strong external balances, solid foreign exchange reserves and continued domestic growth and price stability, has been an important factor to date in dampening exchange rate volatility in East Asia.

4. Vulnerability to further shocks: Significant shifts have occurred over the past six quarters in exchange rate positions, the relative prices of commodities and particularly of oil, the relative growth of key markets and the supply of capital to various economies. Such shifts can create vulnerability to shock for economies with external deficits or budgetary imbalances, significant economic linkages to crisis-hit economies, or dependence on exports of commodities with falling prices.

5. The Euro: The introduction of the Euro on January 1, 1999 is another new factor that might influence the direction of international portfolio flows, adding uncertainties as well as opportunities to the currently fragile global financial environment.

However, despite the above uncertainties, there are notable strengths in the AEPC region, including in the East Asian member economies. First, the majority of APEC member economies have maintained some economic growth, despite the global downturn. Moreover, these economies have combined growth with low inflation and improved fiscal positions and are thus in a position to extend that growth over the medium-term and to serve as an anchor for regional recovery. Secondly, the East Asian economies continue to possess the characteristics that underpinned the sustained strong economic growth of the past three decades. These include high savings and investment rates, well-educated human resources, and an external orientation. Most importantly, the region continues to turn out good products that find ready markets around the world. Accordingly, with the readjustment of economic policies to take account of lessons learned, the restructuring the economic and financial systems that is now underway, and the strengthening of financial surveillance and market mechanisms that has been identified as necessary, there are good grounds on which to base confidence in the future prospects of the APEC region.

1.4 The Financial Crisis: Chronology, Causes and Consequences

When APEC Economic Leaders met in Vancouver in November 1997, the financial crisis was in its fifth month. Its severity was starting to become apparent with four APEC member economies already having had recourse to the International Monetary Fund for assistance in meeting international financial obligations. At the time, although it already had had some repercussions outside of Asia, it was seen to be primarily an East Asian crisis.

A year later, as APEC Economic Leaders prepare to meet again, the crisis has deepened and spread. East Asia is experiencing in 1998 its deepest contraction since the end of the Second World War. Russia is in financial crisis since the *de facto* devaluation of the rouble and the other measures taken in August 1998. A number of Latin American economies are experiencing a destabilizing withdrawal of capital. Interest rate spreads on emerging market debt everywhere have become prohibitively high. With the bailout of a major U.S. investment fund in September 1998, the crisis is demonstrating that, in a globalized economy, the impact can reach into even the strongest economies.

The crisis is now generally seen to be a global crisis and one that is linked to the structure and behavior of international capital and exchange markets. Policy attention has shifted accordingly from the weaknesses in individual economies that made them vulnerable to a crisis of confidence and capital flight to possible limitations of the present international institutional architecture to deal with capital account – as opposed to traditional current account – crises. As the policy considerations broaden to the multilateral level, the hard work goes on within the APEC region to restore stability to the most affected economies. Here the focus is on re-igniting growth and consolidating the stabilization gains that have been made, implementing the longer-term structural reforms that the crisis has shown necessary to reduce the risks of future recurrences, and progressively dealing with the damage wrought by the crisis – sorting out the tangle of non-performing loans, payments arrears and liabilities of bankrupt companies; cleaning up the balance sheets of banking sectors; and restructuring hard-hit but still viable companies. And within the economic research community, implications of the crisis for economic theory and practice are being debated, with no firm consensus view yet in sight.

With the turbulence continuing, the crisis remains, as noted earlier, a major source of uncertainty for the world economic outlook generally and for the APEC region in particular. Moreover, until the global economy has fully and clearly put the crisis behind, any analysis of it remains partial. This section provides an interim stock-taking of the crisis, including:

- a chronology of the main events to date,
- the assessment of the causes and consequences of the crisis by APEC Finance Ministers;
- a summary of the responses to the crisis by APEC through the APEC Finance Ministers, as well as the multilateral and regional responses through the IMF, the World Bank and the Asian Development Bank; and
- views of the IMF, other international bodies as well as a summary of views that have been put forward by the private sector and the economic research community, and a summary of common themes and lessons to be drawn from the crisis.

Chronology of the Financial Crisis in Asia

The choice of a specific date to pinpoint the onset of the crisis is of course somewhat arbitrary. In the first half of 1997, corporate debt problems were evident in Korea with the failure of two *chaebol* (Hanbo and Sammi), and in Thailand where Somprasong, a major land developer, defaulted on foreign debt repayments and Finance One, a major finance company, was continually in the news due to concerns about its financial health prior to its failure in May. Thailand also experienced significant exchange market pressures in May and June of 1997 and the Bangkok SET index trended down steadily through most of the second quarter.

However, it was not clear at the time that these were anything more than transient. Indeed, in Thailand, the defense of the baht was reported as having "burned speculators", the authorities spoke out firmly against any devaluation, and the SET regained most of the quarter's losses in a rally in the second half of June. Nor was there indication of a significant co-movement developing within Asia – stocks in Tokyo, Taipei, Seoul, Jakarta and Hong Kong, China all trended up during the second quarter; Chinese stocks first surged then declined; while Singapore, Manila and Kuala Lumpur experienced comparative shallow declines. The issue of the day in Asia at that time was the impending transition of sovereignty of Hong Kong to China on July 1, 1997. As it turned out, it was the following day, July 2, 1997 that the crisis made itself apparent and where the chronology below picks up.

<u>1997: Third Quarter</u>

On July 2, Thailand's central bank announced the move to a managed float of the baht, which immediately fell in trading that day and several other regional currencies experienced pressure. On July 11, the Philippines' central bank allowed the peso to move within a wider range. On the same day, Bank Indonesia shifted its exchange rate policy from a managed depreciation to a free float. Meanwhile, Bank Negara Malaysia and the Monetary Authority of Singapore also allowed their currencies to adjust. In the ensuing three months, the crisis was more or less contained in Southeast Asia, although pressures continued to build in Korea where it was announced that Kia Motors, another major *chaebol*, was in financial distress. The main developments in this period were the abandonment of pegs and managed floats in favour of floating exchange rates and depreciations of varying degree in Southeast Asia, and as well weakening of equity markets across the region with the outflow of portfolio capital. International responses included the negotiation of an IMF-led US$17.2 billion financial support package for Thailand.

1997: Fourth Quarter

In the fourth quarter, the crisis intensified in Southeast Asia while also breaking out of the region to spread northwards. Chinese Taipei allowed the exchange rate to depreciate in the face of selling pressure. Hong Kong, China came under heavy speculative attack in late October 1997; while it succeeded in defending the HK dollar link to the US dollar, the Hang Seng index fell by nearly ¼. The exchange and equity market pressures shifted next to Korea, which proved more vulnerable. On November 17, the defense of the won at the psychologically important 1,000 mark was relinquished, marking the onset of the crisis in full force in that economy. With the failure of Yamaichi Securities days later, Japan was also seen as clearly embroiled. In Southeast Asia, the situation worsened, particularly in Indonesia and Thailand where there were widespread bank closures and sharp contractions in liquidity. Austerity fiscal measures were announced in Malaysia, Indonesia and Thailand. Vietnam widened the trading range for the dong. Global equity markets may also have felt the effects in October, as the crisis in East Asia was cited as a factor that helped to precipitate a one-day 7 percent decline on the Dow Jones Industrial Index on October 27 and record losses on exchanges in major Latin American markets. Russia's moves to increase interest rates to stem significant foreign currency outflows in mid-November and again in early December were attributed by its central bank to the instability. Overall, the quarter was marked by high volatility in both currency and equity markets with sporadic rallies interspersed with declines. Record daily gains and losses were posted in a number of markets, which in many cases were based on rumors and external events. As the quarter drew to a close, the crisis intensified still further in Korea and Indonesia on market concerns over the amount of short-term foreign debt coming due, credit rating downgrades and the pace of reforms.

International responses included the development of the *Manila Framework for Enhanced Asian Regional Co-operation to Promote Financial Stability* by Finance Deputies from 13 regional economies announced November 19; this was subsequently endorsed by APEC Economic Leaders at their meeting in Vancouver, November 25. The IMF announced a US$ 23 billion rescue package for Indonesia on October 31 and arranged an international accord to provide Korea with $57 billion, including a US$ 21 billion IMF component on December 4. Subsequently, on December 29-30, a standstill on repayment of Korean short-term debt was announced by a group of major international banks.

1998: First Quarter

With the re-opening of business following the New Year's holiday, Asian currencies and equities fell sharply in trading as markets "priced in" a significantly lower economic growth outlook. The focal point was in Southeast Asia where currencies moved to record lows. The Hong Kong, China brokerage Peregrine Investment fell victim to the declines in asset values and closed on January 12. However, the following day, a rally ensued that took Asian equity markets substantially higher through the course of January and particularly in the first days following the Lunar New Year. This helped to restore some value and inspired some market analysts to pronounce the end of the crisis. However, the rally progressively lost steam over the course of February and March. The quarter as a whole was marked by sustained high volatility in financial markets, significant spillovers into lower real economic activity and mounting concerns about social ramifications. Volatility was particularly high in Indonesia reflecting uncertainty over exchange rate policy and economic reforms as well as the social spillovers. Korea made particularly significant gains in stabilization on the financial side but the quarter also saw the release of figures indicating real contraction in industrial output and rising unemployment.

International responses included several agreements with Korea to extend debt repayment extensions to Korean borrowers. Thailand and Indonesia renegotiated their IMF programs in response to significantly lowered economic forecasts and also announced far-reaching reforms agreed with the IMF. On March 27, 1998, the IMF approved a 2-year precautionary stand-by arrangement for the Philippines amounting to SDR 1,021 million. The most immediate objective of the economic program to be supported by the program was to contain the impact of the Asian crisis on the Philippine economy.

1998: Second Quarter

The first quarter bounce back in Asian equities and exchange rates was succeeded by a gradual slide of equity markets in the second quarter that would eventually wipe out the first quarter gains. The slide reflected the steady stream of negative economic news as the impact of the financial crisis on real activity became apparent. The release of the Bank of Japan's *tankan* survey on April 2 indicating low confidence in Japan's corporate sector, and the lowering by Moody's of its outlook on Japan's sovereign debt rating on April 3, focussed the market on Japan and its key role in influencing trends in the region. Japan announced on April 24 its largest fiscal stimulus package ever, which supports projects totaling over 16 trillion yen (approximately US$ 120 billion at then-current exchange rates) or about 3 percent of Japan's GDP, to counter the slowing trend in its economy. The emergence of labour unrest in Korea with the Kia strike and social unrest in Indonesia marked the further evolution of the crisis. Russia and Latin America experienced renewed and intensified bouts of financial turbulence amid fears of the Asian crisis spreading. The yen's gradual decline against the US dollar, breaking through the 140 yen level on June 8, and the situation in Russia increasingly dominated considerations as the quarter wore on.

In terms of international responses, APEC Finance Ministers met in Kananaskis, Canada in May to review the economic situation and response measures taken to date. They agreed on measures to strengthen financial and capital markets. The G-7 Heads of State meeting in Birmingham, England, also considered the crisis and received a report from G-7 Finance Ministers on strengthening the global financial system. Joint U.S.-Japan intervention on June 17 stopped a slide that had taken the yen through the 145 yen level.

1998: Third Quarter

In the third quarter, the crisis moved into its second year and for the first time moved clearly outside the East Asian region. The Asian downturn was an important factor behind the equity market correction in the United States that took the Dow Jones Industrial Index down by close to 2,000 points from its mid-July record high. The sustained pressure on Russian financial markets resulted in the floating of the rouble, a unilateral moratorium on international repayments and a re-scheduling of domestic financial obligations; this too was attributed in part to "contagion" from Asia in addition to domestic factors. The Russian crisis amplified nervousness in international markets resulting in intensification of pressures on other emerging markets, with the market focus shifting to Latin America. Long-Term Capital Management (LCTM), a major U.S. hedge fund, acknowledged heavy trading losses and agreed to an announced US$ 3.6 billion bailout.

Within the G-7 context, calls were made for revamping the international financial architecture,[19] and for concerted measures for addressing the crisis, including international institutional reforms.[20] Malaysia fixed the ringgit-US$ exchange rate and adopted capital controls. As the quarter drew to a close, the U.S. Federal Reserve Board reduced the Federal Funds Rate by ¼ of a percentage point, citing the international situation as a key factor in the decision.

The Current Situation

At the beginning of the fourth quarter, the IMF announced that its global economic growth forecast had been cut to 2 percent in 1998 (reduced from 4¼ percent in the October 1997 forecast) and to 2.5 percent in 1999. At the same time, the Managing Director of the IMF called on the world's Central Banks to cut interest rates to avoid a global recession. U.S. Treasury Secretary Rubin and Federal Reserve Board Chairman Greenspan convened a special meeting of Finance Ministers and Central Bank Governors from 22 economies in Washington on the margins of the semi-annual IMF/World Bank meetings. At the same time, the G-7 agreed that they must accelerate their own economic growth to sustain global demand; that troubled developing economies need to continue pursuing reforms, supported by help from the IMF where necessary and by targeted aid from the World Bank to sustain social safety nets; and that opening of capital accounts be carried out in an orderly, gradual and well-sequenced manner, keeping its pace in line with the strengthening of economies' ability to sustain its consequences. Further monetary policy measures have since been taken, including a second 25 basis point interest rate cut by the U.S. Federal Reserve Board and interest rate cuts in several other major economies.

[19] British Prime Minister Tony Blair unveiled a 5-point plan in a speech on September 21.

[20] For example, Canada's Finance Minister Paul Martin put forward a 6-point plan in a speech on September 29.

Causes and Contributing Factors

As the financial crisis has gained a global dimension, the focus of analysis has shifted, as noted above, from the specific features of the East Asian region that may have given rise to it, to the features of the global financial system that have served to propagate it. Nonetheless, it is of particular interest to APEC member economies to have a clear understanding of the factors that made the region vulnerable in the first place and that triggered the instability. APEC Finance Ministers, at their meeting in Kananaskis, Canada, May 1998, addressed this issue.

As noted by APEC Finance Ministers,[21] the specific factors and underlying conditions that combined to trigger the crisis and that contributed to its spread through this region, include both distinct features and similarities to the conditions leading up to the financial instability experienced by Mexico and other parts of Latin America in 1994-1995, such as large short-term capital inflows, growing current account deficits as well as inadequate banking supervision and regulation.

During the mid-1990s, following a decade of strong growth, signs of overheating emerged in some Asian economies as high investor confidence and ready access to capital fueled excess domestic demand in some economies. This contributed to asset market inflation and large current account deficits, which were financed by large capital inflows from developed economies. These inflows placed strains on policy and institutional frameworks that, in the end, proved excessive for some economies. Rigid exchange rate arrangements and close ties to the U.S. dollar limited the ability of monetary policy to control overheating pressures and encouraged foreign borrowing by the private sector, often at short maturities. The combination of these factors contributed to an excessive accumulation of short-term, unhedged foreign-currency-denominated debt. Inadequate supervision and corporate governance, particularly in the financial sector, inadequate intermediation of foreign and domestic savings, and government-directed lending also contributed to inefficient investment.

In addition, structural problems, including in the financial sector, had been masked by the region's strong growth. Rapid cross-border capital flows in a globalized and integrated financial market also introduced new challenges for macroeconomic management and rendered some of these economies vulnerable to adverse external developments, especially sudden reversals in market sentiment.

In 1997, weakening import demand, particularly for key export products from the Asian region, together with the appreciation of the U.S. dollar against major currencies, which may have reduced the competitiveness of some economies' products, combined to reduce investor confidence in the region. Although the situations of individual economies varied across the region, once the instability started, it tended to spread to economies that markets perceived to have similar vulnerabilities. In some cases, a lack of transparency in financial systems contributed to these market perceptions but

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[21] See APEC Finance Ministers, Joint Ministerial Statement, Kananskis, Alberta, Canada, May 23-24, 1998.

markets did not always appear to differentiate appropriately on the basis of available information about the economic fundamentals of these economies. Moreover, speculation and herding behavior in financial markets, while not the root cause of the turmoil, may have played a role in exacerbating and spreading it.

1.5 Summary of Policy Response to the Financial Crisis

APEC has endorsed the approach to the crisis of the multilateral institutions, including the IMF, the World Bank, and Asian Development Bank, and acknowledged the valuable financial and technical assistance provided bilaterally to the affected economies. Reflecting the roles of the respective international fora, APEC, through the Finance Ministers process, has focussed its efforts in three priority areas: capital market development, capital account liberalization, and strengthening international financial system. The approaches and main measures are set out below.

As well, individual APEC member economies, both those that have been directly affected by the crisis and others as well, have adjusted policies as necessary to restore stability or to sustain growth and stability, as the case may be. These measures are summarized in the individual economy reports.

IMF

The IMF has led and coordinated the international response to the crisis. Most importantly, it has worked in coordination with other international financial institutions and bilateral donors to provide the financial resources to the most-affected economies to meet their international financial obligations and to stabilize their external situations. The IMF has also assisted in the design of economic reform programs to address the longer-term structural problems exposed by the crisis. It has:

- provided or helped arrange substantial financial support;
- made use of the accelerated procedures to meet the exceptional needs of member economies during the crisis;
- helped economies most affected by the crisis to arrange programs of economic reform to restore investor confidence;
- as the situation in the region has developed, the IMF made adjustments to its measures, focusing on the intermediate goals of shortening and easing the reform period in the economies affected.

World Bank

The World Bank has pledged nearly US$18 billion to the East Asian crisis-affected economies and disbursed over US$ 8 billion in loans in the year since July 1997.[22] It sees the main challenge as restoring broadly shared and sustainable growth for the region. To this end it has adopted a three-pronged strategy:

[22] See The World Bank, East Asia: The Road to Recovery, Washington, D.C., September 1998.

1. Supporting structural reforms to restore high quality economic growth;
2. Ensuring that low-income groups are protected during the crisis and then share in eventual recovery; and
3. Working to restore international capital flows.

- Restoring economic growth
  - The World Bank has approved 45 major loans to the region in the first year after the crisis hit and has thus helped to finance a more expansionary fiscal policy to boost demand and to create jobs and income.
  - Structural adjustment programs in Thailand, Indonesia, Korea and the Philippines are aimed at supporting governments in improving financial sector regulation and supervision and restructuring corporations, improving corporate and financial disclosure, better management of debt and contingent liabilities, and implementing legal and regulatory reforms.
  - This has meant closing failed banks and financial institutions, recouping their good assets, re-capitalizing good banks, improving disclosure and bank supervision, and removing government interference in lending decisions and setting interest rates. All of these reforms are essential for the already high saving rates in the region to be channeled into productive investment so that economies can resume the strong growth they had enjoyed prior to the crisis.
  - In the corporate sectors, reforms include urgent mechanisms to deal with corporate distress as well as fundamental reforms to improve accounting and public disclosure, new requirements for governance of corporations, and enhanced competition through better trade access, removal of subsidies and other barriers.
  - External financing must resume on a more sustainable basis. It is essential to restore private financial flows. Governments must also have the administrative capacity to monitor and manage external debt better, and avoid exposing their economies to volatile capital movements. This does not imply a retreat from global financial markets, but rather establishing more stable linkages.

- Strengthening Social Protection for the Poor
  - Introduction or expansion of welfare schemes in city and country areas, to provide a cushion against unemployment. These programs must be continually monitored and adjusted in the face of rapidly changing economic conditions.
  - Protection of public spending categories that assist the poor, including primary social services, such as maternal and child healthcare, and investments in rural infrastructure and marginal urban areas.
  - Exploring the establishment of community networks between civil society, governments, and the World Bank to measure and address the impact of the crisis on vulnerable groups.

- Building Better Governance
  - The link between good economic performance and open governance is clear. Irrespective of political systems, public decisions must be made transparently,

not only just to please the markets but also to build the public consensus that is so vital to ensure real economic success.

Asian Development Bank

The Asian Development Bank (ADB) has liaised closely with its member economies, the IMF, the World Bank and bilateral donors to develop its interventions in respect of the crisis. These efforts culminated in loans and support to several affected member economies. The ADB also continued with its normal program, one part of which – promoting reforms in the capital and financial markets – has become particularly important in the wake of the crisis.

APEC Finance Ministers

At the meeting in Kananaskis, Canada, in May 1998, APEC Finance Ministers assessed future prospects for the region in light of the Asian crisis and discussed policies and measures to improve these prospects. [23] The discussions focussed on two broad themes – the current economic situation and policies to restore financial stability and growth, including measures to strengthen social safety nets to help cushion the impact of the crisis on the poor. The second theme was the development and strengthening of financial markets in the region so as to reduce the likelihood of future financial instability and to facilitate the continued dynamic growth of the region.

Ministers acknowledged that the crisis is a global problem with regional manifestations, reaffirmed the central role of the IMF, welcomed measures to strengthen its capacity and flexibility and endorsed its approach and that of the World Bank and the Asian development Bank in addressing the financial instability in Asia.

In respect of the development and strengthening of financial markets in the region, Ministers strongly endorsed the idea of enhancing surveillance of financial sector supervisory regimes and looked forward to the international financial institutions and the international regulatory community studying ways in which this might be accomplished, including options for better coordination or enhanced forms of collaboration, such as a peer review process, to strengthen or complement existing global or regional arrangements. They also welcomed and endorsed the Basle Core Principles on Effective Banking Supervision and urged the International Conference of Banking Supervisors to endorse these; endorsed the report on Financial Stability in Emerging Market Economies prepared by the G-I0 in collaboration with a number of emerging market economies; noted the Asian Development Bank's work in developing "Sound Practices to Facilitate Development of the Financial Sectors in the APEC Region" reflecting the lessons of the financial instability in Asia; and looked forward to the results of IOSCO's current efforts to develop an appropriate set of principles for supervision of securities markets.

[23] See APEC Finance Ministers, Joint Ministerial Statement, Kananaskis, Canada, May, 1998.

In respect of capital market development, Ministers: examined ways to strengthen clearing and settlement infrastructure within APEC member economies; considered the role that pension funds can play in mobilizing private savings and broadening the demand base for long-term debt instruments; endorsed recommendations supporting the development of asset-backed securitization; welcomed the protocol agreement signed by fifteen Export Financing Institutions and Export Credit Agencies from across the region to cooperate to facilitate private financing of infrastructure; called on the Asian Development Bank to explore strategies to promote private financing for infrastructure; received a progress report on the collaborative initiative to support the development of credit rating agencies and strengthening of information disclosure standards; encouraged the development of independent rating agencies according to international best practices; examined the current experiences with credit rating agencies in the region to determine how well they are fulfilling their key role in promoting the flow of timely and accurate information across capital markets; encouraged steps to strengthen information disclosure standards in the region consistent with international best practices; and agreed to begin work on a new collaborative initiative on the development of domestic bond markets in the region to be coordinated by Hong Kong, China, building on the contributions on this subject from the APEC Financiers Group.

In respect of capital account liberalization, Ministers: agreed to continue work on a Voluntary Action Plan For Supporting the Freer and Stable Flow of Capital; requested a study drawing on the experiences of member economies in managing capital account liberalization while maintaining macroeconomic and financial stability; and requested further work on the effective monitoring of capital flows.

In respect of strengthening financial systems, Ministers: endorsed two action plans for strengthening training of bank supervisors and securities regulators in APEC economies; called for their timely and comprehensive implementation in collaboration with the Asian Development Bank, the South East Asian Central Banks Research and Training Centre (SEACEN) and the Asia-Pacific Regional Committee of IOSCO; welcomed other training initiatives, including the joint initiative of Canada and the World Bank to establish the Toronto International Leadership Centre for Financial Sector Supervision, the opening of the ADB Institute in Tokyo, the IMF-Singapore Regional Training Institute (STI), and bilateral training assistance provided by individual economies; welcomed the initiative of the APEC Financiers Group to create a private-sector training and education program for financiers across the APEC region; and agreed on a new initiative to be coordinated by Malaysia in conjunction with the World Bank and the Asian Development Bank to examine ways of strengthening corporate governance in the APEC region (including a seminar to be hosted by Australia to obtain business input in identifying priorities for reform in this area).

1.6 Commentaries on the Crisis: Highlights and Themes

The analysis of the issues within APEC is broadly concordant with the views of other major international organizations (see Boxes 1.1 to 1.4). Many of these themes have also been elaborated and developed by academics, research institutes and individual observers.[24] While a full review of the insights that have emerged on this topic is well beyond the scope of this report, some interesting additional aspects have been identified and some common themes have emerged. These are highlighted in Box 1.5. Important themes that emerge from this review include the following:

1. The crisis has highlighted the vulnerability created by sustained large current account deficits.
2. External policy anchors, such as fixed or loosely pegged exchange rates, create vulnerability to changes in external conditions.
3. Rising capital-output ratios during periods of rapid growth can be a warning that investment activity is exceeding the absorptive capacity of the economy.
4. There is a need for full and timely disclosure of all relevant economic and financial data, including by monetary authorities on foreign reserves, reflecting the role that uncertainty about financial data played in amplifying market concerns.
5. Financial reforms need to take into account risks of cross-ownership of financial institutions and commercial corporations and proceed cautiously in expanding powers of financial institutions, ensuring that supervisory capability keeps pace.
6. Prudential regulation needs to be tightened and supervision improved in many economies, reflecting the general assessment that inadequacies in these areas had contributed to the build up of vulnerability.
7. Capital account liberalization must be carefully sequenced, reflecting the perception that large capital inflows into inadequately developed financial and capital markets had also contributed to the build up of vulnerability.
8. Corporate governance and financial reporting in the private sectors of many economies needs to be improved, reflecting the role that lack of transparency played in the reluctance of outside investors to re-enter markets, even when values appeared to have fallen below levels warranted on the basis of known information.

Other issues have proven controversial. For example, moral hazard is a major concern when governments intervene to bailout private investors. At the same time, failures can have significant negative externalities if markets do not accurately differentiate across risks, as appears to have been the case at times in the course of the crisis in East Asia – a situation, of course, that the suspect quality of information available to private investors may have in fact helped to create.

The crisis has also highlighted the importance of understanding the inter-dependence between types of vulnerabilities, which creates non-linear and hence unpredictable behavior. Features of economies that may be comparatively benign in isolation, when brought together may be volatile. Thus, for example, high corporate debt-equity ratios (e.g., such as characterized Korean industrial firms) may be considerably less risky[25] in circumstances where the banking system does not have term or currency mis-matches. However, the combination of the two can lead to a "meltdown" dynamic as witnessed

[24] As perhaps the first global economic crisis of the Internet age, the crisis has spawned an extensive virtual dialogue through literature published to the web.

[25] Indeed, in some economies, reliance on bank debt and strong relationships with patient bankers has been argued to promote sound longer-term orientation in industry, rather than focussing on the next quarter's earnings.

at times during the crisis. The interaction between adverse selection and moral hazard can create a situation where markets are unable to channel funds efficiently – which has been termed a "nonlinear disruption of financial markets".[26]

It is also noteworthy that the metaphors used to describe the course of the crisis have been drawn from disciplines other than traditional economics. For example, "herding behavior" of investors, which has been argued to have been a factor in the crisis both in adding to the euphoric mood during the period of rapid capital inflows to Asia and in contributing to the rush to exit these markets as the crisis gathered momentum, is a sociological phenomenon. This too is intrinsically non-linear form of behavior, driven by "positive feedback".[27] Other metaphors that have been used come from biology ("contagion", virulence" and so forth), the weather ("storms"); or nuclear physics ("meltdown"); in each case the underlying models are non-linear and complex. The strikingly non-linear and complex features of the crisis have been noted by observers.[28]

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[26] Mishkin (1997) as cited in the Asian Development Bank, Asian Development Outlook 1998, Oxford University Press, Hong Kong, 1998)

[27] "Positive" in the sense that is self-reinforcing and accentuates trends, just as "negative" feedback tends to dampen trends.

[28] See Robin Bienenstock and Thomas Homer-Dixon "The end of pop economics: standard analyses of the current financial crisis won't help, and may make things worse", Globe and Mail, Toronto, September 3, 1998; p. A19. These issues were explored at the Economic Committee's 1998 APEC Economic Outlook Symposium in Xiamen, China, May 16-17, 1998. See Economic Committee, Proceedings of the Committee's 1998 APEC Economic Outlook Symposium, (forthcoming).

Box 1.1: The Crisis in East Asian Economies: IMF Assessment[29]

Origins:

- Private sector expenditure and financing decisions.

Contributing Domestic Factors:

- Inadequate financial sector supervision and lax enforcement of prudential rules.
- Poor assessment and management of financial risk by the private sector.
- Government involvement in the private sector (government-directed lending).
- Lack of transparency in corporate and fiscal accounting and the provision of financial and economic data, which hindered market participants from maintaining a realistic view of economic fundamentals and added uncertainty.
- Buildup of overheating pressures which were manifest in large external deficits and inflated property and stock market values.
- The maintenance of relatively fixed exchange rates.
- Problems of governance and political uncertainties.

Contributing External Factors:

- Weak growth in Europe and Japan left a shortage of attractive investment opportunities and kept interest rates in these economies low.
- Large capital flows to emerging markets were driven by underestimation of risks by international investors searching for higher yields.
- U.S. dollar appreciation against the yen (which, through the relatively fixed exchange rate links, contributed to loss of export competitiveness and associated export slowdown of some economies).

The Dynamic:

- Banks and corporations in the crisis economies were able to borrow large amounts of international capital, much of it short-term, denominated in foreign currency, and unhedged, creating excessive foreign exchange risk in both the financial and corporate sectors.
- As time went on, this inflow of foreign capital tended to be used to finance poorer-quality investments.
- Past successes may also have contributed to a tendency by policymakers to deny the need for action when problems first became apparent.
- International investors may have contributed significantly to the downward pressure on currencies in crisis, alongside domestic investors and residents seeking to hedge their foreign currency exposures; but hedge funds appear to have played a significant role only in the case of the Thai baht.

[29] See IMF, World Economic Outlook, May 1998; and The IMF's Response to the Asian Crisis, September 1, 1998

Box 1.2: The Crisis in East Asian Economies: World Bank Assessment[30]

Origins:

- The East Asian miracle was real and tangible and based on conservative macroeconomic policies, investment in human capital, encouragement of high rates of savings, limited price distortions, encouragement of absorption of foreign technology and avoidance of biases against agriculture.
- Several structural and long-term development problems (growth outpacing sophistication of financial system, transition to mobile, urban market economy straining traditional family-based social protection mechanisms, and environmental stresses) were well-known and analyzed prior to the crisis, and evidence does not support identification of these problems as precipitating the crisis.
- Emergence of structural vulnerability in some economies reflected the interaction of: burgeoning availability of private (especially short-term) capital; macroeconomic policies that permitted capital inflows to fuel a credit boom; and newly liberalized and rapidly growing, but insufficiently regulated, financial markets.

Contributing Domestic Factors:

- Rapid growth of the corporate sector in a context of under-developed bond markets and over-reliance on bank credit led to comparatively high corporate debt-equity and interest-burden ratios in some economies, especially in Korea. This imperiled these corporations in the event of interest rate increases.
- The tightening of monetary policy to deal with overheating pressures and to sterilize capital inflows and curtail credit expansion raised domestic interest rates as well as the differential between domestic and foreign rates, with the perverse effect of increasing incentives for investors to borrow abroad to make local investments.
- This was facilitated by creation of "off-shore" financial markets in which local borrowers could, due to regulatory and tax advantages, obtain lower-cost finance.
- The switch by some Southeast Asian economies from real exchange rate targets to nominal anchors in the form of loose pegs to the US$ led to predictable nominal rates and relatively narrow exchange rate movements, suppressing incentives to hedge external borrowing and creating a bias towards short-term borrowing.
- Inconsistent reforms and inappropriate sequencing of liberalization added to vulnerabilities. Examples in individual economies include:
  - Cross-ownership between lending and borrowing institutions was allowed;
  - Inadequate screening of owners/managers in rapidly growing financial systems;
  - Expansion of range of activities of financial institutions without commensurate improvement of supervision;
  - Capital account transactions were liberalized for foreign investors but not for domestic investors, limiting scope for risk diversification by the latter; and
  - Throughout the region, regulations requiring prudential management of currency risks, credit evaluation, and public financial reporting were wholly inadequate.

[30] See The World Bank, East Asia: The Road to Recovery, Washington, D.C., September 1998

- Access to foreign markets was only available to the largest and best credit corporations, whose access to political leaders made it more difficult for regulators to limit “off-shore” borrowing to prudent levels.
- The quality of investment declined in some economies as witnessed in rising capital-output ratios in Korea and Thailand after 1988.
- Widening current account deficits, financed with short-term debt, exposed the economies to sudden reversals of capital flows.
- Capital inflows fueled a domestic credit boom, with broad money (M2) expanding at a near 20 percent annual rate in 1996-97 in the crisis economies. This led to an increase in asset prices that gave the appearance of high returns and created additional collateral for further lending.
- Vulnerability to runs was comparatively high in the most-affected economies given:
    - A comparatively high ratio of short-term foreign debt to foreign reserves, a rough measure of ability to meet foreign obligations, (which rose sharply in some economies from 1994 to 1997 and was well over 150 percent in June 1997 in the most affected economies).
    - A comparatively high ratio of broad money to reserves, a measure of the potential for a “run” on the foreign exchange reserves of an economy with a fixed exchange rate by its own residents when there is a loss of confidence in the local currency.

<u>Contributing External Factors</u>:

- Acceleration of growth in private capital inflows to nearly 30 percent per annum (from US$ 42 billion in 1990 to US$ 256 billion in 1997), with the most mobile forms, commercial bank debt and portfolio investments, setting the pace. This growth was propelled by an aggressive search for ever higher returns to capital by financial institutions trapped in slow growing but highly competitive home markets.
- Depreciation of the yen against the US$ from mid-1995 meant that economies with currency pegs to the U.S. lost competitiveness in the important yen market.
- Negligible due diligence from foreign lenders.
- Global slump in demand for key export products (electronics) in 1996.
- Slow growth in the key Japanese market.

<u>The Dynamic:</u>

- In 1996, export growth hit a wall; Thailand was the worst hit.
- At the same time, prices of real assets in Thailand stopped growing.
- Equity investors were the first to withdraw, and the equity market fell 30 percent by year-end 1996 from its February peak. Perceptions began to take hold that asset prices were too high and that the exchange rate was misaligned, and by early 1997, private capital flows had started to taper off.
- On July 2, 1997, the Thai government yielded to the market forces and abandoned the peg, setting off the first phase, which was a currency crisis and was characterized initially by a high degree of co-movement of regional exchange rates.
- The currency crisis became a financial crisis, which became, in turn, an economic and social crisis; monetary and fiscal policy tightening to cope with the financial panic, which would not have been contractionary under initial growth assumptions, turned out *ex post* to have been so.

Box 1.3: The Crisis in East Asian Economies: ADB Assessment[31]

Origins:

- Explanations for previous currency crises (fiscal profligacy or excessive monetary expansion and/or persistent large unemployment) do not fit the Asian crisis well.
- Principal elements include the pegged exchange rate, private capital inflows, financial sector imbalances and frailties, and weaknesses in the corporate sector.

Contributing Domestic Factors:

- There was some erosion of competitiveness of some affected economies in labour-intensive products in relation to lower-wage Asian competitors.
- Financial liberalization in Asian developing economies in the late 1980s and 1990s opened up new investment opportunities for industrial economy investors looking for higher returns and greater risk diversification ("pull" factor for private investment inflows).
- Slow progress was made in opening up certain sectors of the economy to foreign investors may have channeled foreign capital into sectors that were open, such as properties and equities, leading to sharp increases in these asset prices.
- Pegged nominal exchange rates created a false sense of security among many investors and led to real appreciation of exchange rates given combination of higher domestic inflation than world average and external exchange rate developments.
- There was a "double whammy" of moral hazard problems:
  - on the part of borrowers, in taking large risks with borrowed funds;
  - on the part of lenders, relying on the perception of implicit guarantees created by strong connections between politicians and owners of these institutions and past instances of government help to financial institutions in distress.
- Inadequacy of prudential standards in some economies, in some cases compounded by the lack of the independence that was needed by supervisory and regulatory authorities to enforce these standards.

Contributing External Factors:

- In 1996, a sharp cyclical decline in the demand for semiconductors and other electronic products occurred, coupled with generally slower growth of world trade.
- Appreciation of the U.S. dollar, depreciation of the yen and many European currencies, and the 1994 devaluation of the renminbi.
- Weak growth in Europe and Japan left a shortage of attractive investment opportunities and kept interest rates low in those economies, leading investors from these economies to look for lucrative investment opportunities abroad ("push" factor for the capital inflows to Asia).
- Investment exuberance in international capital markets and associated "herding behaviour" on the part of investors (i.e., investors following each other in investment decisions, irrespective of whether the particular investment is warranted by economic fundamentals).

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[31] See ADB, Asian Development Outlook 1998, Oxford University Press (China), Hong Kong, 1998.

The Dynamic:

- Macroeconomic vulnerabilities were few; current account deficits were relatively large (in affected economies) but were more than offset by foreign capital inflows which both added to reserves and led to an appreciation of real exchange rates.
- Once the surge of private capital inflows started, a rampant increase in domestic asset prices ensued, which induced further capital inflows.
- The upsurge of foreign capital brought about three sets of imbalances in the banking sectors of the affected economies that made them critically vulnerable in the event of a reversal of net private capital inflows:
  - First, between 1993 and 1996, the foreign liabilities of the commercial banks in affected economies increased by about 12 percent per year, while foreign assets increased by about 7 percent per year, expanding the net foreign debt position.
  - Second, much of the collateral that the banks accepted was real estate and equities, assets whose prices contained a large "bubble" element.
  - Third, the maturity structure of the banks' assets and liabilities was imbalanced as the banks were borrowing short and lending long.
- The trigger for the crisis was the 1996 export slowdown which led to skepticism about the robustness of economic growth in the affected economies. This threatened the large inflow of foreign capital, which was now badly needed to sustain the increasing current account deficits, and led to market concerns about the prevailing exchange rates.
- When private capital flows reversed:
  - exchange rates depreciated, increasing banks' foreign liabilities (as debt contracts were often denominated in foreign currencies);
  - equity and real estate prices deflated, diminishing the value of banks' collateral; and
  - the maturity mismatch wreaked havoc with banks' balance sheets.
- The financial crisis intermingled with the currency crisis to create a vicious downward spiral in the economy.
- Once investors realized that there were no implicit government guarantees, asset price bubbles burst, resulting in insolvency of the financial institutions that had lent on the basis of the higher values.

Box 1.4: The Crisis in East Asian Economies: OECD Assessment[32]

Origins:

- Excessive optimism and a tendency toward overheating, coupled with
- Long-standing structural weaknesses that amplified the crisis.

Contributing Domestic Factors:

- Weakness in corporate governance arrangements.
- Lack of transparency concerning corporations' financial situation and their relationship to the government sector.
- Tendencies to high indebtedness and over-leveraging in the business sector.
- Financial institutions were allowed to continue operating with high levels of non-performing loans.
- Excessive domestic optimism caused by the sustained high growth before the crisis.
- Maintenance by most emerging market economies in the region of either exchange rate pegs to the US dollar or management of the exchange rate while attaching a higher weight to the dollar than today's trade relations would justify.

Contributing External Factors:

- Excessive optimism in financial institutions in Europe, North America and Japan as to prospects in the region and a resulting insufficient weighing of downside risks.
- The sharp rise of the dollar, notably against the Japanese yen, after mid-1995.

The Dynamic:

- The very high levels of investment were reflected in large current account deficits (mainly in Southeast Asia) and/or excessive and often highly leveraged concentrations of capital in particular areas, mainly property and commercial buildings, but also in Korea in important industrial sectors. This led to:
  - Over-capacity, unsustainable rises in asset prices, low returns on investment or even operating losses, and severe balance sheet problems which threatened the viability of both non-financial enterprises and banking systems in the region.
  - Current account deficits that were financed largely by short-term capital inflows, which immediately before the crisis were at record levels, leaving the region vulnerable to international liquidity problems in the event of any diminishing of optimism about its prospects, at a time when investment performance was increasingly inviting more cautious assessment of these prospects.
- When the U.S. dollar appreciated against the yen after mid-1995, the erosion of competitiveness of economies with close exchange rate links to it put particular pressure on industries that compete in third markets with Japanese counterparts.
- The trigger for the crisis was the reassessment by international financial markets of prospects in Thailand, leading to the depreciation of the baht. When the Thai baht fell, it created pressures for similar developments to occur or to threaten elsewhere in the region; a domino effect set in and the crisis spread.

[32] Source: OECD.

Box 1.5: Private Sector Views on the Financial Crisis

On Structural Reforms:

- Market turbulence has underscored the need for financial firms to strengthen risk management systems and to take fuller account of the risks in the global financial system, including high volatility. These actions will reinforce sound lending, underwriting and investment decisions.[1]
- Structural changes such as fundamental reform of banking and corporate governance systems are far more difficult and socially disruptive than cutting budget deficits, money growth and overvalued exchanges, the central responses to most previous crises.[2]
- The Southeast Asian currency collapse … was an inevitable consequence of persistent large current account deficits and of the misguided attempt to maintain fixed exchange rates relative to the dollar… imposing major structural and institutional reforms as opposed to focusing on balance-of-payments adjustments will have adverse consequences.[3]

Need for Fiscal and Monetary Stimulus

- Recovery will require a boost to domestic expansion from fiscal and monetary stimulus; export-led recovery will not work because Asian economies rely too heavily on each other's markets.[4]
- The balance of risks in the world economy has shifted. Accordingly, strong efforts are needed to revitalize the Japanese economy, and there is a growing need for an easing of monetary policy in the United States and Europe.[5]

Investor behaviour

- What turned a bad financial situation into a catastrophe was the way a loss of confidence turned into self-reinforcing panic.[6]
- The general flight to quality as investors reassess the risks of exposure in high-yield markets, including emerging markets, has widened spreads dramatically, and the lack of investor interest has sharply curtailed access for emerging market borrowers. It is essential that the private financial community differentiate appropriately among lending opportunities based on the underlying fundamentals. Differentiation by equity investors is equally important.[7]
- Once crises are underway, no one really knows what it takes to get [investor] confidence back.[8]

On Capital Controls

- Unilateral approaches to debt-servicing difficulties are highly counterproductive and will seriously impair restoration of access to global capital markets. The application of wide-ranging, indiscriminate capital controls provides no alternative to sound policies and will seriously damage medium-term prospects for raising standards of living.[9]
- Many analysts now agree that foreign financial flows should be regulated in some way; the question is how to make openness to the market less perilous.[10]

- Only last year was there a move to build in full capital account convertibility as an obligation of International Monetary Fund membership. Most sensible advocates of liberalization would, however, now agree that this was "bad sequencing". Such freedom should come at the end of a transitional period in which adequate domestic financial institutions and full transparency have been established.[11]
- Developing countries should impose their own supervisory controls on short-term international borrowing by domestic financial institutions. To avoid panicky capital outflows, it is best to prevent banks from exposing themselves to excess short-term indebtedness in the first place. Chile does this by taxing short-term flows; other approaches may be worth exploring.[12]
- In effect, the region's economic policy has become hostage to skittish investors. Is there any way out? Yes, there is, but is a solution so unfashionable, so stigmatized, that hardly anyone has dared suggest it. The unsayable words are exchange controls. Any chance of attracting new foreign investment would disappear. The financial markets would probably go into another swoon. But the damage, though painful, would be only temporary. As interest rates fell, local economies would eventually recover, confidence would return (for real), and those nasty currency controls could be dropped – one hopes forever.[13]

On Moral Hazard

- To the extent that foreign creditors are willing to lend to domestic agents against future bail-out revenue from the government, unprofitable projects and cash shortfalls are re-financed through external borrowing.[14]
- Promising creditors that they will not lose in the current crisis also encourages those lenders and others to take excessive future risks borrowers and the lending bankers or bondholders should bear primary responsibility for resolving the problems that arise when countries or their corporations cannot meet their international debt obligations.[15]
- The most difficult and far-reaching change in [the international institutional] architecture would be to create a mechanism so that the private sector would be made to bear more fully the consequences of its own lending decisions.[16]
- What's needed is a three-step program of triage, liquidation or merger, and workouts for troubled corporations and banks. These will begin restoring confidence to the region and help prevent future crises
    1. First, each country should establish a mechanism for quickly performing triage on all firms (above a certain size, for administrative practicality) and banks facing bankruptcy, using an exchange rate assumed to be some significant level below the rate before the crisis began, but above current, excessively depressed market levels.
    2. Second, firms and banks that are nonetheless insolvent under this exchange rate by some threshold margin (such as negative net worth in excess of 20 percent of assets) should be subject to a presumption of liquidation or forced merger, unless creditors quickly accept an equity-for-debt swap.
    3. Third, all insolvent firms and banks not subject to liquidation, as well as banks with capital below regulatory standards, should be eligible for Chapter 11-type workouts, with lenders required to exchange some portion of debt for equity to give the restructured firm a reasonable chance of survival.

- More importantly, there is no need for a grand, new international bankruptcy agency or mechanism, as some have proposed. The debt problems are internal to each country and, unlike the Mexico crisis, stem from borrowings by the private sector rather than by governments.[17]

[1] Dr. Georges Blum, Mr. Toru Hashimoto, Mr. William R. Rhodes, Mr. Charles H. Dallara, Institute of International Finance Inc., Press Release, Sept. 16, 1998.
[2] Fred Bergsten, Director, International Economic Institute, Policy Brief, September 20, 1998.
[3] Martin Feldstein, Professor, President of National Bureau of Economic Research, Foreign Affairs, March/April 1998.
[4] Fred Bergsten, Director, International Economic Institute, Policy Brief, September 20, 1998.
[5] Dr. Georges Blum, Mr. Toru Hashimoto, Mr. William R. Rhodes, Mr. Charles H. Dallara, Institute of International Finance Inc., Press Release, Sept. 16, 1998.
[6] Paul Krugman, Fortune Magazine, September 7, 1998.
[7] Dr. Georges Blum, Mr. Toru Hashimoto, Mr. William R. Rhodes, Mr. Charles H. Dallara, Institute of International Finance Inc., Press Release, Sept. 16, 1998.
[8] Robert Litan, Director, Economic Studies, Brookings Institute, cited in "Currency Turmoil Upset Confidence, Baffles Many" Asia Wall Street Journal, August 24, 1998.
[9] Dr. Georges Blum, Mr. Toru Hashimoto, Mr. William R. Rhodes, Mr. Charles H. Dallara, Institute of International Finance Inc., Press Release, Sept. 16, 1998.
[10] Professor Devesh Kapur, Foreign Policy, Summer 1998
[11] Samuel Brittan, Financial Times, October 2, 1998
[12] Jeffrey Sachs, Professor, Harvard, The Economist, September 12, 1998,
[13] Paul Krugman, Professor, MIT, Fortune Magazine, September 7, 1998.
[14] Giancarlo Corsetti, Yale University and University of Rome III, Paola Pesenti, Federal Reserve Bank of New York and NBER, Nouriel Roubini, New York University, CEPR and NBER, September, 1998
[15] Martin Feldstein, Professor, President of National Bureau of Economic Research, Foreign Affairs, March/April 1998.
[16] Lawrence B. Krause, Professor Emeritus, Council on Foreign Relations, June 1998.
[17] Robert Litan, Director, Economic Studies, Brookings Institute, Policy Brief, February 1998

Chapter 1: Statistical Appendix

Summary Tables and Figures:

Main Indicators for the APEC Region

Table 1.1

Real GDP Growth in the APEC Region

(percent change per annum, except as indicated)

	1994 GDP Share	1997 GDP Share	1992	1993	1994	1995	1996	1997	1998
Western Hemisphere	53.42	54.35	2.7	2.3	3.6	1.6	2.9	4.1	3.8
Canada	3.67	3.70	0.9	2.5	3.9	2.2	1.2	3.7	2.9
Chile	0.35	0.05	12.3	7.0	5.7	10.6	7.4	7.1	5.0
Mexico	2.82	2.40	3.6	2.0	4.4	-6.2	5.2	7.0	4.5
Peru	n/a	0.40	-1.7	6.4	13.1	7.4	2.5	7.2	3.0
United States	46.58	48.20	2.7	2.3	3.5	2.0	2.8	3.9	3.5
Northeast Asia	40.20	35.97	2.8	2.2	2.5	2.95	4.4	2.8	-0.3
China	3.63	5.54	14.2	13.5	12.6	10.5	9.6	8.8	8.0
Hong Kong, China	0.88	1.03	6.3	6.1	5.4	3.9	4.6	5.3	-4.0
Japan	31.52	25.00	1.0	0.3	0.6	1.5	3.9	0.8	-1.8
Korea	2.55	2.70	5.1	5.8	8.6	8.9	7.1	5.5	-5.0
Chinese Taipei	1.62	1.70	6.8	6.3	6.5	6.0	5.7	6.8	5.3
Southeast Asia	3.83	3.75	6.5	7.4	8.0	8.0	7.2	4.6	-4.5
Brunei Darussalam	0.04	0.05	-1.1	0.5	1.8	2.0	3.5	4.0	1.8
Indonesia	1.18	0.80	7.2	7.3	7.5	8.1	8.0	4.6	-13.5
Malaysia	0.49	0.60	7.8	8.3	9.2	9.5	8.6	7.7	-4.8
Philippines	0.43	0.50	0.3	2.1	4.4	4.8	5.7	5.2	1.0
Singapore	0.73	0.60	6.2	10.4	10.5	8.7	6.9	7.8	1.0
Thailand	0.96	1.00	8.1	8.3	8.8	8.6	5.5	-0.4	-7.0
Vietnam	n/a	0.20	8.6	8.1	8.8	9.5	9.3	8.8	6.0
Oceania	2.57	2.85	2.5	4.3	5.2	3.7	3.6	2.8	2.9
Australia	2.18	2.40	2.6	4.0	5.1	3.8	3.7	3.0	3.5
New Zealand	0.35	0.40	0.8	5.0	5.9	3.9	3.2	2.3	-0.5
Papua New Guinea	0.04	0.05	13.86	13.3.	5.2	-2.9	3.9	-4.6	2.5
Russia	n/a	2.70	-14.5	-8.7	-12.7	-4.1	-5.0	0.9	-6.0
APEC (w/o Japan & US)	21.90	26.80	5.9	6.1	7.1	4.9	5.7	5.3	1.7
APEC	100.00	100.00	2.9	2.5	3.4	2.5	3.7	3.5	1.8

Sources and Notes: See end-notes.

Table 1.2

Increases in CPI in APEC Member Economies

(percent change per annum)

	1991	1992	1993	1994	1995	1996	1997	1998
Western Hemisphere								
Canada	5.6	1.5	1.8	0.2	1.9	1.6	1.6	1.5
Chile	18.7	12.7	12.2	8.9	8.2	6.6	6.0	4.5
Mexico	22.7	15.5	9.7	7.0	35.0	34.4	20.6	15.3
Peru	n/a	73.3	48.6	23.7	11.1	11.6	6.5	7.5
United States	4.0	3.0	3.0	2.6	2.8	2.9	2.3	2.3
Northeast Asia								
China	3.4	6.4	14.7	24.1	17.1	8.3	2.8	2.0
Hong Kong, China	11.6	9.6	8.8	8.8	9.1	6.3	5.8	3.5
Japan	3.3	1.6	1.3	0.7	-0.1	0.1	1.8	0.1
Korea	9.3	6.2	4.8	6.2	4.5	4.9	4.4	8.0
Chinese Taipei	3.6	4.5	2.9	4.1	3.7	3.1	0.9	1.9
Southeast Asia								
Brunei Darussalam	1.6	1.3	4.3	2.4	6.0	2.0	1.7	2.0
Indonesia	9.5	4.9	9.8	9.2	8.6	6.5	11.1	60
Malaysia	4.4	4.7	3.6	3.7	3.4	3.5	2.7	6.0
Philippines	18.7	8.9	7.6	9.0	8.1	8.4	5.1	10.0
Singapore	3.4	2.3	2.3	3.1	1.7	1.4	2.0	1.8
Thailand	5.7	4.1	3.3	5.0	5.8	5.9	5.6	9.2
Vietnam	n/a	17.6	5.2	14.4	12.7	4.5	3.6	7.0
Oceania								
Australia	3.2	1.0	1.8	1.9	4.6	2.6	0.3	2.5
New Zealand	0.9	1.3	1.4	2.8	2.9	2.6	0.8	0.7
Papua New Guinea	7.5	4.3	4.9	2.9	17.3	11.6	3.9	n/a
Russia	n/a	26.1	9.4	3.2	2.3	1.2	1.1	48
APEC	4.7	3.1	3.2	3.1	3.6	3.2	2.7	4.0

Sources and Notes: See end-notes

Table 1.3
Unemployment Rates in APEC Member Economies
(percent)

	1991	1992	1993	1994	1995	1996	1997
Western Hemisphere							
Canada	10.4	11.3	11.2	10.4	9.5	9.7	9.2
Chile	8.2	6.7	6.6	7.8	7.3	6.3	6.1
Mexico	2.7	2.8	3.4	3.6	6.3	5.5	3.2
Peru	n/a	9.4	9.9	8.9	7.1	7.2	8.6
United States	6.8	7.5	6.9	6.1	5.6	5.4	4.9
Northeast Asia							
China	2.3	2.3	2.6	2.8	2.9	3.0	3.1
Hong Kong, China	1.8	2.0	2.0	1.9	3.2	2.8	2.2
Japan	2.1	2.2	2.5	2.9	3.2	3.4	3.4
Korea	2.3	2.4	2.8	2.4	2.0	2.0	2.6
Chinese Taipei	1.5	1.5	1.5	1.6	1.8	2.6	2.7
Southeast Asia							
Brunei Darussalam	4.7	4.5	4.1	3.6	4.9	5.0	5.0
Indonesia	2.5	2.7	3.1	4.4	7.0	4.9	6.0
Malaysia	4.3	3.7	3.0	2.9	2.8	2.5	2.7
Philippines	10.5	9.8	9.3	9.5	9.5	8.6	8.7
Singapore	1.8	2.0	1.9	2.0	2.0	2.0	1.8
Thailand	3.1	3.0	2.6	2.6	2.6	2.0	3.5
Vietnam	n/a	n/a	n/a	n/a	n/a	6.0	8.5
Oceania							
Australia	9.6	10.8	10.9	9.7	8.5	8.6	8.6
New Zealand	10.6	10.3	9.2	7.4	6.2	6.0	6.7
Papua New Guinea	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Russia	n/a	0.76	1.11	2.21	3.15	3.43	2.75
APEC	3.26	3.35	3.51	3.65	3.95	3.75	4.0

Sources and Notes: See end-notes

Table 1.4
Current Account Balances as a Share of GDP
(percent, except as indicated)

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Western Hemisphere									
Canada	-3.8	-3.6	-3.9	-2.5	-1.0	0.6	-1.5	-2.0	-1.6
Chile	-0.3	2.3	-5.7	-3.1	-2.1	-5.4	-5.3	-7.0	-5.5
Mexico	-4.6	-6.7	-5.8	-7.0	-0.6	-0.6	-1.8	-3.4	-2.3
Peru	n/a	-5.0	-5.6	-5.3	-7.3	-5.9	-5.2	n/a	n/a
United States	-0.1	-0.9	-1.4	-1.9	-1.8	-1.8	-1.9	-2.8	-3.3
Northeast Asia									
China	3.0	1.3	-2.0	1.4	0.2	0.9	3.3	3.4	3.3
Hong Kong, China	6.6	5.3	7.0	1.2	-4.3	-1.4	-3.5	-0.0	1.2
Japan	2.0	3.0	3.1	2.8	2.1	1.4	2.3	3.6	4.0
Korea	-3.0	-1.5	0.1	-1.2	-1.9	-4.9	-1.9	12.9	7.9
Chinese Taipei	6.9	4.0	3.2	2.7	2.1	4.0	2.7	2.0	2.2
Southeast Asia									
Brunei Darussalam	76.9	60.0	47.8	63.7	47.4	52.1	48.9	n/a	n/a
Indonesia	-3.4	-2.2	-1.5	-1.7	-3.4	-3.4	-2.7	2.5	2.7
Malaysia	-8.8	-3.8	-4.8	-6.3	-10.0	-4.9	-4.8	6.5	4.6
Philippines	-1.9	-1.6	-5.5	-4.6	-4.4	-4.7	-5.2	-1.5	-0.7
Singapore	11.2	12.0	7.3	16.2	16.9	15.9	15.4	20.6	18.9
Thailand	-7.0	-5.7	-5.1	-5.6	-8.1	-7.9	-2.0	10.7	9.9
Vietnam	n/a	-0.1	-5.9	-7.6	-9.4	-9.8	-6.4	n/a	n/a
Oceania									
Australia	-3.1	-3.8	-3.5	-5.3	-5.6	-4.0	-3.2	-5.0	-5.4
New Zealand	-2.2	-2.7	-1.2	-2.2	-3.1	-3.9	-7.7	-6.5	-6.0
Papua New Guinea	-4.1	2.2	12.8	10.8	16.7	5.5	-6.6	n/a	n/a
Russia	n/a	n/a	6.9	3.4	3.3	2.8	0.65	-1.3	-0.7

Sources and Notes: See end-notes

Table 1.5

Merchandise Trade Balances as a Share of GDP

(percent)

	1991	1992	1993	1994	1995	1996	1997
Western Hemisphere							
Canada	-0.7	-0.4	-0.01	1.1	3.0	3.8	1.7
Chile	4.6	1.7	-2.2	1.4	2.1	-1.6	-1.7
Mexico	-2.3	-4.4	-3.3	-4.4	2.5	2.0	0.2
Peru	n/a	-0.3	-0.6	-1.0	-2.2	-2.0	-2.7
United States	-0.5	-1.5	-2.0	-2.4	-2.4	-2.5	-2.4
Northeast Asia							
China	2.0	0.9	-2.0	1.0	2.4	1.5	4.5
Hong Kong, China	-2.4	-4.3	-3.3	-8.4	-14.1	-11.9	-12.2
Japan	2.8	3.3	3.3	3.1	2.6	1.8	2.4
Korea	-2.4	-0.7	0.6	-0.8	-1.0	-3.2	-0.5
Chinese Taipei	8.7	6.0	5.1	4.9	5.1	6.5	5.1
Southeast Asia							
Brunei Darussalam	36.9	24.7	11.1	10.1	7.9	4.4	12.2
Indonesia	2.6	4.8	5.4	4.6	2.8	1.5	4.4
Malaysia	1.1	5.8	5.0	2.4	0.04	4.0	4.0
Philippines	-7.1	-8.9	-11.4	-12.2	-12.1	-13.5	-13.4
Singapore	-5.8	-3.7	-4.7	1.9	1.1	2.4	1.2
Thailand	-6.0	-3.6	-3.4	-2.6	-4.9	-5.1	-3.2
Vietnam	n/a	-0.6	-4.3	-7.7	-11.5	-13.5	-9.5
Oceania							
Australia	1.2	0.6	0.0	-1.0	-1.2	-0.2	0.4
New Zealand	5.0	4.1	4.1	2.7	1.5	0.8	0.9
Papua New Guinea	2.1	14.8	29.9	25.1	29.8	19.8	8.9
Russia	n/a	n/a	8.5	6.4	6.0	5.4	3.8

Sources and Notes: See end-notes

Table 1.6
Non-Merchandise Trade Balances as a Share of GDP
(percent)

	1991	1992	1993	1994	1995	1996	1997
Western Hemisphere							
Canada	-3.1	-3.2	-3.8	-3.7	-4.0	-3.4	-3.2
Chile	-4.9	0.6	-3.5	-4.5	-4.2	-3.8	-3.6
Mexico	-2.3	-2.3	-2.5	-2.6	-3.1	-2.6	-2.0
Peru	n/a	-4.7	-5.0	-4.3	-5.1	-3.9	-3.4
United States	0.4	-0.3	-0.3	-0.4	-0.4	-0.4	0.5
Northeast Asia							
China	1.0	0.4	0.05	0.4	-2.2	-0.6	-1.2
Hong Kong, China	9.0	9.6	10.3	9.6	9.7	10.5	8.7
Japan	-0.8	-0.3	-0.2	-0.3	-0.5	-0.4	-0.1
Korea	-0.6	-0.8	-0.5	-0.4	-0.9	-1.7	-1.4
Chinese Taipei	-1.8	-2.0	-2.0	-2.2	-3.0	-2.7	-2.2
Southeast Asia							
Brunei Darussalam	40.0	35.2	36.0	58.5	49.3	48.1	36.7
Indonesia	-6.0	-7.0	-6.9	-6.3	-6.2	-5.5	-8.2
Malaysia	-9.9	-9.6	-9.8	-8.7	-10.0	-9.0	-8.8
Philippines	5.2	7.3	5.8	7.7	7.6	9.1	8.2
Singapore	17.0	19.2	16.0	18.6	18.4	15.6	14.2
Thailand	-1.0	-2.1	-1.7	-3.0	-3.2	-3.2	1.0
Vietnam	n/a	0.5	-1.6	0.1	2.1	3.7	-1.5
Oceania							
Australia	-4.3	-3.9	-3.3	-4.0	-4.1	-3.6	-3.7
New Zealand	-7.2	-6.8	-5.3	-5.2	-5.2	-5.0	-8.6
Papua New Guinea	-6.2	-12.6	-17.1	-14.3	-15.5	-14.0	-6.4
Russia	n/a	n/a	-1.6	-3.0	-2.7	-2.6	-3.15

Sources and Notes: See end-notes

Table 1.7
Exchange Rate Movement on Bilateral and Multilateral Bases:
June 1997 to July 1998 (1)

(percent)

	Bilateral Exchange Rate		Nominal Effective Exchange Rate		Real Effective Exchange Rate	
	Versus U..S. dollar	Versus Japanese yen	INS weights(2)	DOTS weights(3)	INS weights(2)	DOTS weights(3)
Western Hemisphere						
Canada	-6.8	14.8	-2.0	-3.5	-2.9	-4.7
Chile	-10.2	10.6	-3.8	-0.7	-0.1	1.5
Mexico	-10.6	10.2	-6.3	-8.4	7.3	4.6
Peru	n/a	n/a	n/a	n/a	n/a	n/a
United States	--	23.2	12.0	15.8	11.4	12.6
Northeast Asia						
China	--	22.9	8.0	15.2	3.1	8.7
Hong Kong, China	--	23.1	9.6	16.3	15.0	19.2
Japan	-18.8	--	-10.1	-2.4	-12.6	-6.9
Korea	-30.3	-14.1	-23.8	-17.7	-18.3	-13.9
Chinese Taipei	-18.9	-0.1	-10.6	-6.1	-11.7	-9.1
Southeast Asia						
Brunei Darussalam	n/a	n/a	n/a	n/a	n/a	n/a
Indonesia	-82.4	-78.3	-80.2	-79.4	-70.2	-69.2
Malaysia	-39.1	-25.0	-30.4	-28.5	-28.0	-26.5
Philippines	-35.5	-20.6	-28.3	-27.4	-22.2	-21.4
Singapore	-16.4	3.0	-3.0	4.7	-4.2	1.4
Thailand	-37.5	-23.0	-29.9	-26.2	-23.2	-20.1
Vietnam	n/a	n/a	n/a	n/a	n/a	n/a
Oceania						
Australia	-18.0	1.1	-10.2	-0.2	-11.4	-3.6
New Zealand	-24.6	-7.2	-17.4	-11.3	-17.1	-12.2
Papua New Guinea	n/a	n/a	n/a	n/a	n/a	n/a
Russia	n/a	n/a	n/a	n/a	n/a	n/a

Sources and Notes: See end-notes

Table 1.8
Selected Asian Economies: Capital Flows
(percent of GDP)

	1991	1992	1993	1994	1995	1996	1997
Indonesia							
Net Private capital flow	4.6	2.5	3.1	3.9	6.2	6.3	1.6
Net direct investment	1.2	1.2	1.2	1.4	2.3	2.8	2.0
Net portfolio investment	-	-	1.1	0.6	0.7	0.8	-0.4
Other net investment	3.5	1.4	0.7	1.9	3.1	2.7	0.1
Net official flows	1.1	1.1	0.9	0.1	-0.2	-0.7	1.0
Change in reserves	2.4	-3.0	-1.3	0.4	-0.7	-2.3	1.8
Malaysia							
Net Private capital flow	11..2	15.1	17.4	1.5	8.8	9.6	4.7
Net direct investment	8.3	8.9	7.8	5.7	4.8	5.1	5.3
Net portfolio investment	-	-	-	-	-	-	-
Other net investment	2.9	6.2	9.7	-4.2	4.1	4.5	-0.6
Net official flows	0.4	-0.1	-0.6	0.2	-0.1	-0.1	-0.1
Change in reserves	-2.6	-11.3	-17.7	4.3	2.0	-2.5	3.6
Philippines							
Net Private capital flow	1.6	2.0	2.6	5.0	4.6	9.8	0.5
Net direct investment	1.2	1.3	1.6	2.0	1.8	1.6	1.4
Net portfolio investment	0.3	0.1	-0.1	0.4	0.3	-0.2	-5.3
Other net investment	0.2	0.6	1.1	2.5	2.4	8.5	4.5
Net official flows	3.3	1.9	2.3	0.8	1.4	0.2	0.8
Change in reserves	-2.3	-1.5	-1.1	-1.9	-0.9	-4.8	2.1
Thailand							
Net Private capital flow	10.7	8.7	8.4	8.6	12.7	9.3	-10.9
Net direct investment	1.5	1.4	1.1	0.7	0.7	0.9	1.3
Net portfolio investment	_	0.5	3.2	0.9	1.9	0.6	0.4
Other net investment	9.2	6.8	4.1	7.0	10.0	7.7	-12.6
Net official flows	1.1	0.1	0.2	0.1	0.7	0.7	4.9
Change in reserves	-4.3	-2.8	-3.2	-3.0	-4.4	-1.2	9.7
Korea							
Net Private capital flow	2.2	2.4	1.6	3.1	3.9	4.9	2.8
Net direct investment	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	-0.2
Net portfolio investment	1.1	1.9	3.2	1.8	1.9	2.3	-0.3
Other net investment	1.3	0.7	-1.5	1.7	2.5	3.0	3.4
Net official flows	0.1	-0.2	-0.6	-0.1	-0.1	-0.1	-0.1
Change in reserves	0.4	-1.1	-0.9	-1.4	-1.5	0.3	-1.1

Table 8 (continued)

Singapore							
Net Private capital flow	1.7	-2.7	9.4	2.5	1.3	-10.1	-5.5
Net direct investment	8.8	2.1	5.5	4.8	4.9	4.3	5.3
Net portfolio investment	-2.1	3.3	0.5	1.1	0.9	-16.2	-14.4
Other net investment	-5.1	-8.0	3.4	-3.4	-4.6	1.8	3.6
Net official flows	-	-	-	-	-	-	-
Change in reserves	-9.6	-12.3	-12.9	-6.7	-7.2	-11.1	-14.6
Chinese Taipei							
Net Private capital flow	-1.2	-3.2	-2.1	-0.6	-3.6	-3.2	-3.8
Net direct investment	-0.3	-0.5	-0.7	-0.5	-0.4	-0.7	-0.6
Net portfolio investment	-	0.2	0.5	0.4	0.2	-0.4	-0.6
Other net investment	-0.9	-3.0	-1.9	-0.5	-3.3	-2.1	-2.6
Net official flows	-	-	-	-	-	-	-
Change in reserves	-5.4	-0.6	-0.7	-1.9	1.5	-0.4	0.7
China							
Net Private capital flow	1.7	-0.9	4.5	5.6	5.2	4.7	3.7
Net direct investment	0.9	1.7	5.3	5.9	4.8	4.6	4.3
Net portfolio investment	0.1	-	0.7	0.7	0.1	0.3	0.2
Other net investment	0.7	-2.6	-1.5	-0.9	0.2	-0.3	-0.8
Net official flows	0.3	0.8	0.9	0.4	0.3	0.2	-0.1
Change in reserves	-3.7	0.5	-0.4	-5.6	-3.2	-4.0	-4.5

<u>Sources and Notes</u>: See end-notes

Sources and Notes

Table 1.1: Real GDP Growth in the APEC Region

Historical data for individual economies for the period 1991-1997 were provided by member economies, except for Papua New Guinea, which are drawn from IMF and ADB sources. Data are for real GDP growth on an annual average basis.

Forecasts for 1998 are from official sources and on a calendar year basis, except as follows:
- For Canada, which does not make an official forecast, the latest private sector consensus available, as made available by the Government of Canada, is provided.
- For Australia, New Zealand, Russia and the USA, the forecast is drawn from the IMF, World Economic Outlook (September 1998). For Australia and New Zealand, the corresponding official forecasts for these economies on a fiscal year basis are: Australia 2.75 percent; and New Zealand: -0.5 percent.
- For Japan, the forecast figure refers to fiscal year FY 1998-99.
- For economies providing a range as the forecast, the mid-point was taken for the point estimates of regional growth, these include:
- Singapore: the forecast provided by the authorities is the range 0.5 to 1.5; the mid-point of 1.0 percent is represented in the table.
- Vietnam: the authorites project 6-7 percent growth after 1998; the mid-point of this range, 6.5 percent, is represented in the table.

APEC-wide and sub-regional averages before 1997 were calculated using 1994 nominal GDP levels as weights and did not include Peru, Russia and Vietnam. For Russia, the forecast is from the IMF, World Economic Outlook, September 1998. For 1997 and 1998 APEC-wide and sub-regional averages were calculated using 1997 nominal GDP levels as weights..

Table 1.2: Increases in CPI in APEC Member Economies

Historical data for individual economies for the period 1991-1997 were provided by member economies except in the case of Papua New Guinea, where the figures are drawn from IMF and ADB sources.

The data refer to annual average inflation as measured by consumer price indexes in the member economie, except for Chile, New Zealand and Peru, the figures for which refer to December-over-December inflation rates. In the case of the the Philippinese, which provided the range 9.5 to 10.5 as the forecast, the midpoint of 10 percent is represented in the table.

1998 forecasts are drawn from official sources except as follows:
- For Indonesia, the forecast is from the IMF since the authorities forecast of 90-100 percent inflation is in terms of cumulative inflation within the year and differs substantially from the annual average.
- For Mexico, the forecast is also drawn from the IMF as a more represntative of 1998 outcomes than the within-year target.
- For Russia, Singapore and the USA, the forecast are drawn from the IMF, World Economic Outlook (September 1998), as as the most recent calendar year forecasts available.
- For Australia, Japan and New Zealand, the forecast figures refer to the 1998-99 fiscal years.

APEC-wide and sub-regional averages before 1997 were calculated using 1994 nominal GDP levels as weights and did not include Peru, Russia and Vietnam. For 1997 and 1998 regional averages were calculated using 1997 nominal GDP levels as weights. For economies providing a range as the forecast, the mid-point was taken for the point estimates of regional growth

Table 1.3: Unemployment Rates in APEC Member Economies

Historical data for individual economies for the period 1991-1997 were provided by member economies except in the case of Papua New Guinea, where the figures are drawn from IMF and ADB sources.

APEC-wide averages for the period 1991-1997 were derived using 1994 labour force weights and did not include Peru, Russia and Vietnam.

Table 1.4: Current Account Balances as a Share of GDP

Historical data for individual economies for the period 1991-1997 were provided by member economies except in the case of Papua New Guinea, where the figures are drawn from IMF and ADB sources. For Hong Kong, China, the figures refer to sum of visible and invisible trade balances.

Forecasts for 1998 and 1999 are drawn from the IMF, World Economic Outlook (September 1998), Table 2-12, except for Peru, in which case the forecast is provided by the government.

Table 1.5: Merchandise Trade Balances as a Share of GDP

Source: data were provided by member economies.

Table 1.6: Non-Merchandise Trade Balances as a Share of GDP

Source: Data represent services trade balance plus net investment income and net transfers as a share of GDP; this table is derived as the current account balance as provided in Table 4 minus the merchandise trade balance as provided in Table 5.

Table 1.7: Exchange Rate Movement on Bilateral and Multilateral Bases: June 1997 to July 1998

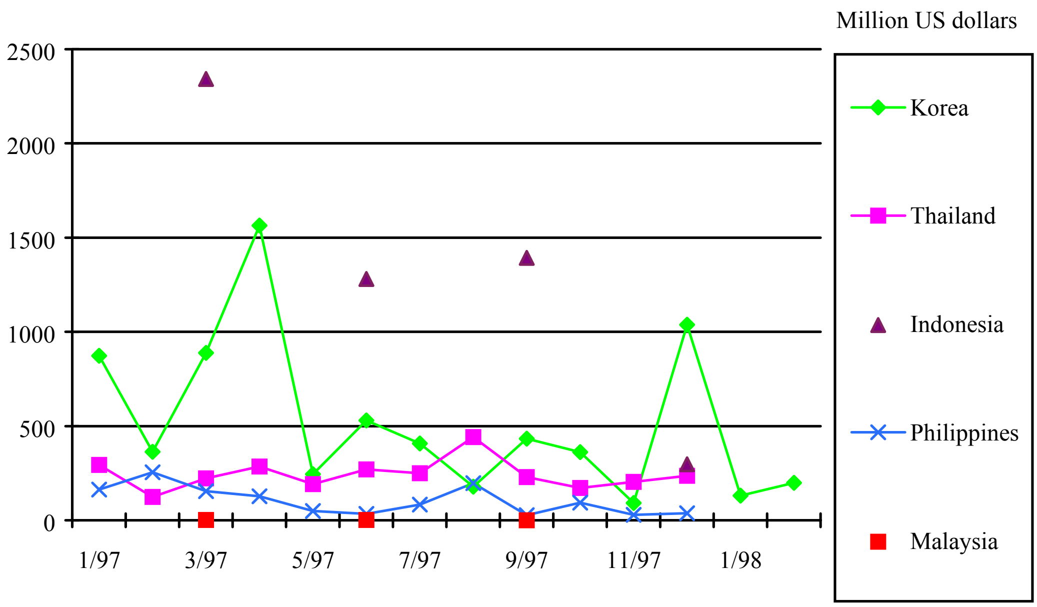
Sources: IMF, Direction of Trade Statistics (DOTS) and Information Notice System (INS) databases; and WEFA, Inc;

Notes:
1. The data represent the change from June 1997 to July 1998 on the basis of monthly average data. A positive number means appreciation of currency of member economy indicated at left.
2. Partner economy weights capture both bilateral and third-economy effects, based on data for 1988-1990.
3. Partner economy weights capture only bilateral trade, based on data for 1994-1996.

Table 1.8: Selected Asian Economies: Capital Flows

Source: Figures are drawn from IMF World Economic Outlook (December 1997)

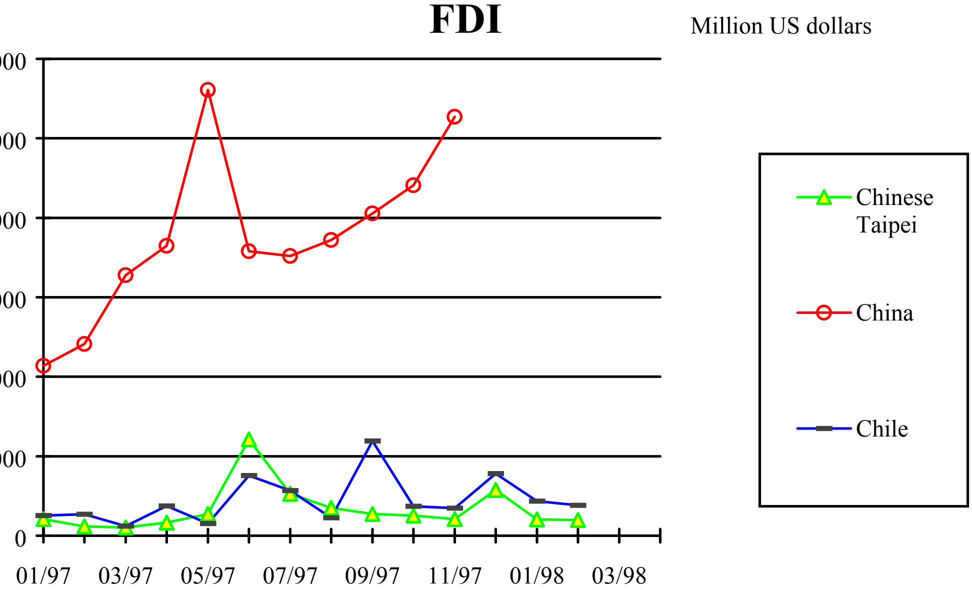
Notes:
1. Net capital flows comprise net direct investment, net portfolio investment, and other long-and short-term net investment flows, including official and private borrowing.
2. Because of data limitations, other net investment may include some official flows.
3. Change in reserves: a minus sign indicates an increase.



Notes and Sources:

1. Data for individual economies are provided by member economies.
2. Data for Indonesia and Malaysia are quarterly.

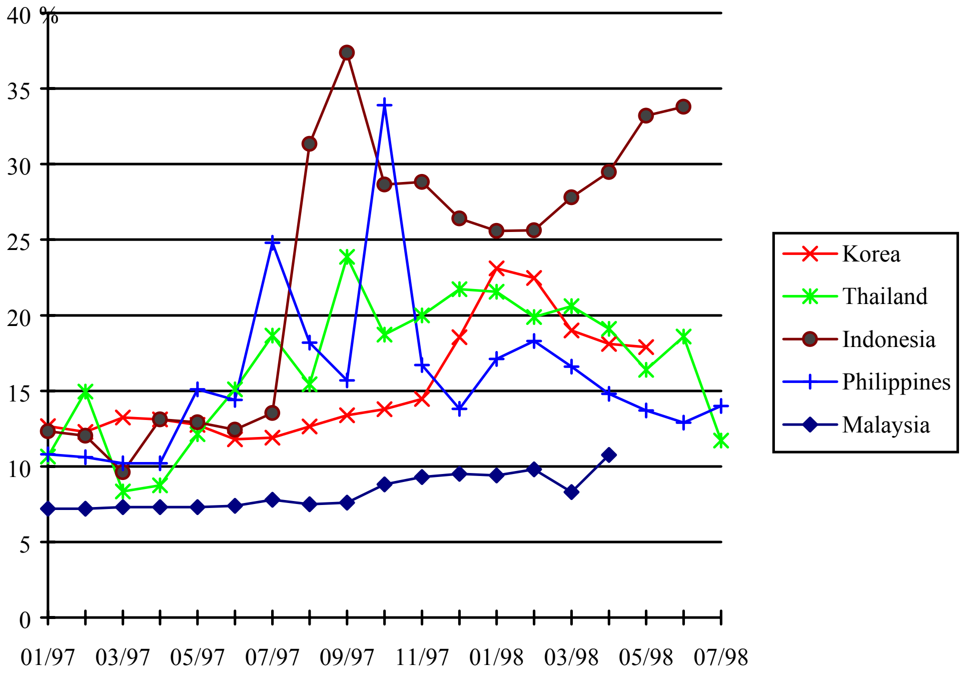
Figure 2 Selected Developing Economies: FDI



Notes and Sources:

1. Data for individual economies are provided by member economies.

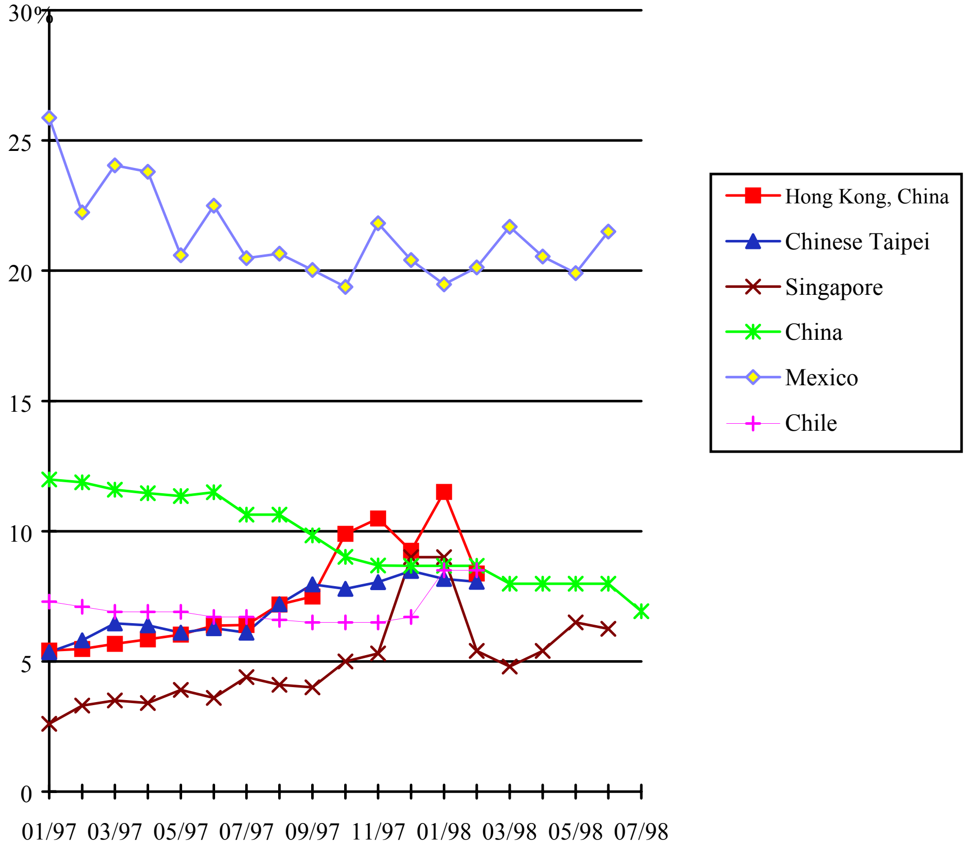
Figure 3 Most Affected Economies: Interest Rate



Notes and Sources:

1. Interest rates of Philippines and Thailand are the three-month interbank rate. Interest rate of Korea is 91-day CD rate. Interest rate of Indonesia is 7-day interbank rate. Interest rate of Malaysia is 3-month fixed deposit rate.
2. For Indonesia and Philippines, all 1998 figures are drawn from IMF, International Financial Statistics, September, 1998. For Korea and Thailand, figures after March 1998 are drawn from IMF, International Financial Statistics, September, 1998, as the most recent source. Note that these data cannot be directly compared to the official data for the preceding period.

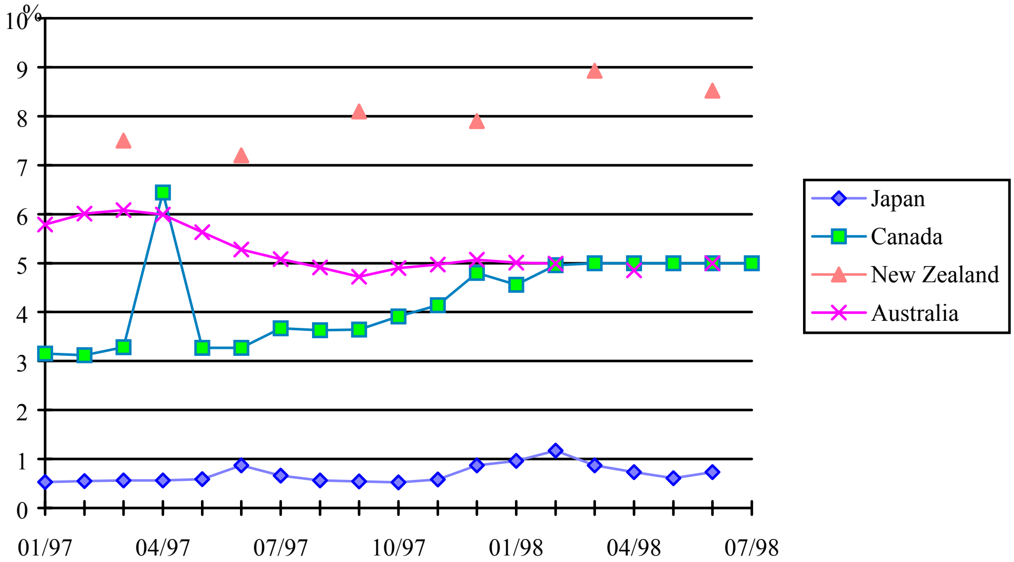
Figure 4 Selected Developing Economies: Interest Rate



Notes and Sources:

1. Interest rate of Hong Kong, China is the 3-month average interbank rate. Interest rate of Chile is the 90-day central bank indexed notes.
2. For Mexico, 1998 figures are drawn from IMF, International Financial Statistics, September, 1998 as the most recent source. Note that these data cannot be directly compared to the official data.

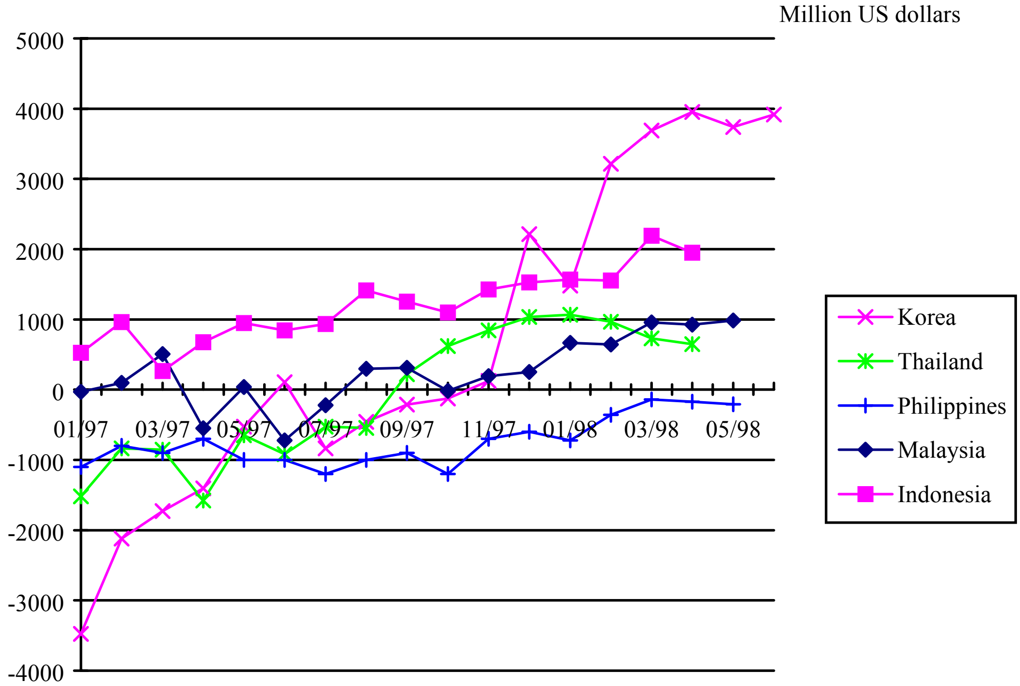
Figure 5 Selected Advanced Economies: Interest Rate



Notes and Sources:

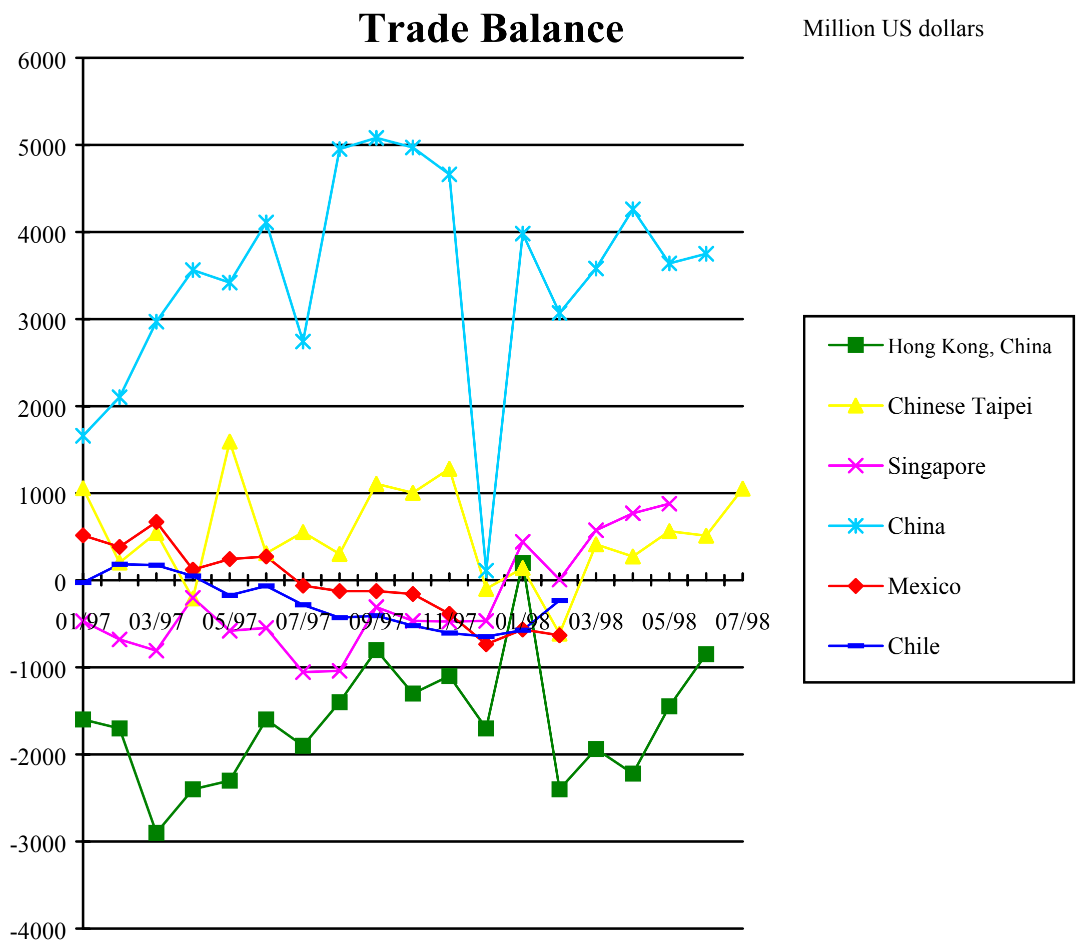
1. Interest rate of Canada is the 90-day Commercial Paper Rate. Interest rates of New Zealand and Australia are the 90-day bank bill rate.
2. Interest rates for Japan are based on quarterly data.
3. For Australia, Japan and Canada, figures after February 1998 are drawn from IMF, International Financial Statistics, September, 1998 as the most recent source. Note that these data cannot be directly compared to the official data.

Figure 6 Most Affected Economies : Trade Balance



Notes and Sources:

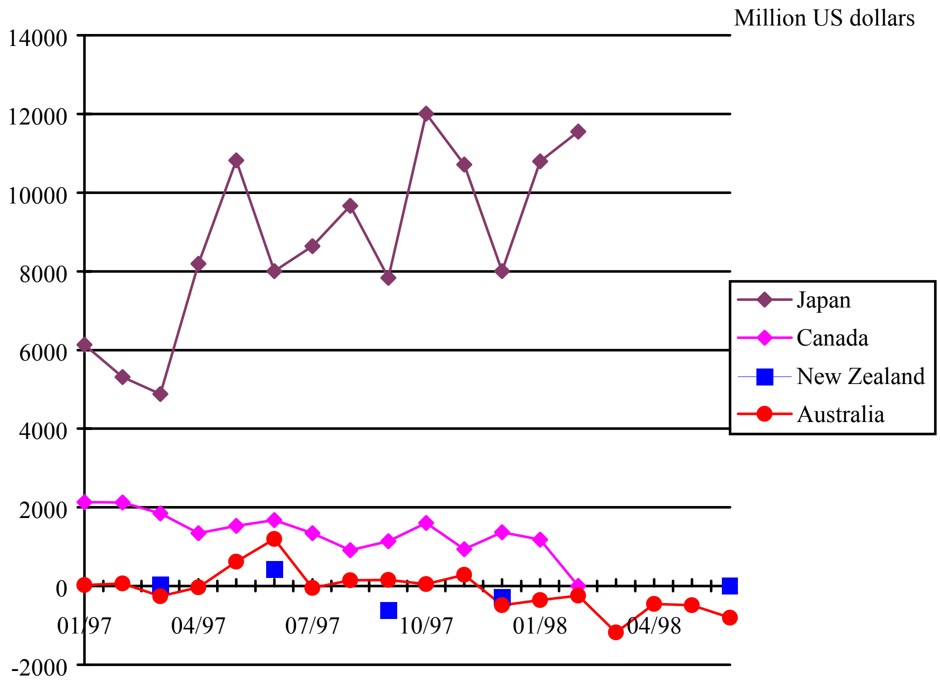
1. Data for individual economies are provided by member economies.
2. Trade balance refers to export (FOB) minus import (CIF).
3. For Thailand, Indonesia and the Philippines, 1998 figures are drawn from official sources.



Notes and Sources:

1. Data for individual economies are provided by member economies.
2. Trade balance refers to export (FOB) minus import (CIF).

Figure 8 Selected Advanced Economies: Trade Balance



Notes and Sources:

1. Data for individual economies are provided by member economies.
2. Trade balance refers to export (FOB) minus import (CIF).

Chapter 2

Technical Cooperation and Sustained Economic Development of the APEC Region

2.1 Introduction

In recent years, the rapid development of new information technologies, along with the trend of economic globalization, has dramatically changed the way that knowledge is generated, diffused and applied around the globe. Knowledge, particularly scientific and technological knowledge, has become the key strategic resource that shapes the form and structure of economic growth. This new development presents opportunities for sustained economic growth and development in the APEC region.[1] It also presents challenges for economies to put in place the economic and policy frameworks that will allow them to take advantage of these opportunities – and to maintain their competitive position in an ever-tougher international marketplace.

Meanwhile, the financial crisis in East Asia that started in mid-1997 has prompted much retrospection and in the process has led many to re-open the debate that had taken place in the mid-1990s prior to the crisis about the sources of the rapid economic growth that East Asia had enjoyed over the past few decades. One view advanced at that time called into question the sustainability of the rapid economic growth in East Asia on the grounds that it was based simply on increasing factor inputs – i.e., accumulating physical capital, mobilizing labour and acquiring technology developed elsewhere – rather than on the development of new technology and the enhancement of efficiency of production.[2] While this argument has not been cited as constituting either an explanation or prediction of the present crisis, the sudden vulnerability of a once economically dynamic region does raise questions as to the fundamental sources of economic growth and development and ways to sustain that process.

This issue is highly relevant to APEC member economies at this time, and especially to those in East Asia. For the latter economies, the restoration of dynamic economic growth and development is premised not only on implementation of the financial and other microeconomic reforms that the crisis has exposed as necessary, but also on continued technological progress to keep pace with the evolution towards the knowledge-based economy worldwide. However, all economies have an interest at this time of unyielding pressures for structural reforms to carefully consider the process

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[1] See the APEC Economic Committee, Towards an Information Society: Developments in APEC, APEC Secretariat, Singapore, November 1998, for a thorough review of the evolution of the information society and knowledge-based economy within the Asia Pacific region.

[2] See Paul Krugman, "The Myth of Asia's Miracle", Foreign Affairs, Vol. 73, No.6, 1994; and Alwyn Young, "The Tyranny of Numbers: Confronting the Statistical Reality of the East Asian Growth Experience", Quarterly Journal of Economics, Vol. 110, No.3, 1995.

through which innovation transforms products, production processes and indeed the very fabric of economic life – the way that commerce is done, the linkages through which institutions interact with one another, and the respective roles that individuals, firms and governments play.

To this end, the discussion below examines the role of innovation in economic growth and considers how APEC can take advantage of the diversity of its member economies to facilitate, through enhanced economic and technical cooperation, the region's technological evolution and in so doing help to achieve sustainable development. In these regards, it builds on the general framework for economic growth provided by the Economic Committee's *1996 APEC Economic Outlook* and *Report on the State of Economic and Technical Cooperation in APEC*, with a particular focus on promoting technological modernization and innovative activity.

The discussion is organized as follows. The next section reviews briefly the theoretical and empirical analysis of the role of technological innovation in economic growth and identifies the basic mechanisms through which innovation takes place and finds its way into practical economic applications – learning by doing, research and development, and imitation or spillovers.

The following section then considers a number of approaches to measuring the innovative capability of economies and tries to shed light on the current situation in this regard in the APEC region. It summarizes briefly the trend towards development of National Innovation Systems as a means of systematically addressing the issues faced by economies in facilitating and supporting technological innovation and reviews various measures of innovation-related activity in APEC member economies and their progress towards becoming knowledge-based economies.

Against this background, the chapter then undertakes a systematic review of APEC's economic and technical cooperation agenda to consider options for creating a more conducive environment for technological modernization and innovative activity within the APEC region.

2.2 Technological innovation and sustained economic development

The central role of innovation in economic growth has long been recognized by economic thinkers. Indeed, some economists such as Joseph Schumpeter argued that innovation, in the form of new products, new processes, new markets, and new management methods, is the basic engine of economic growth.[3] The experience of the last half-century within both the developed and newly industrialized economies in the APEC region has demonstrated the importance of this insight. In recent years, this concept has been further refined into the "new growth theory" by economists such as Paul Romer and others,[4] which in turn has been used to explain the low-unemployment,

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[3] Joseph A. Schumpeter, Capitalism, Socialism and Democracy, Harper & Row, Publishers, Inc., 1942.

[4] See, in particular, Paul Romer, "Endogenous Technological Change," Journal of Political Economy,

low-inflation and high-growth economic performance in the United States over the last seven years.

Early studies into the sources of economic growth focussed primarily on explaining the long-term expansion of the U.S. economy. These studies tended to find that only a relatively small proportion of U.S. growth could be attributed to accumulation of factor inputs; the unexplained residual was identified with growth in “total factor productivity” (TFP), which in turn was associated with technological advance.[5] Subsequent analysis, however, found that most of this residual could be explained by taking into account the improvements in the quality of inputs.[6]

The differences in the findings reflect less on the importance of technological change, on which there was general agreement, than on whether technological change is thought of as “embodied” or “disembodied”, and whether or not technical progress has been fully captured in economic statistics. With respect to the first issue, technological change is understood to be in large measure manifested in the machinery and equipment that incorporates new technologies and in the human capital created by education and training. Its contribution to growth, therefore, is combined with the contribution coming from accumulation of new capital equipment and the growth in employment accounted for by well-educated new workers. Methodologies that refine estimates of labour and capital input to capture quality improvements end up attributing a much greater contribution to growth to these inputs. By the same token, these methodologies leave a much smaller total factor productivity residual to be explained as disembodied technical change, which in this case would be the efficiency gains that cannot be attributed to any other specific source (e.g., increased efficiency in combining factor inputs in the production process, reduced frictional costs of doing business and so forth).[7] The second issue, that of measurement, was raised primarily by the observation that measured productivity in the services sector and in government had not grown over the course of decades in many economies, at a time when these sectors were being transformed by the information revolution which has put a computer on virtually every employee’s desk. This discrepancy between the intuitive conclusions drawn from observation and those drawn from formally measured productivity growth, often referred to as the "productivity paradox", was particularly great in the financial services sector where the range of services had grown substantially, as had the

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Vol. 98, 1990; and Gene Grossman and Elhahan Helpman, Innovation and Growth in the Global Economy, MIT Press, Cambridge, 1992, Chapter 5.

5 See, for example, Robert Solow, “Technical Change and the Aggregate Production Function”, Review of Economics and Statistics, Vol. 39, August 1957, pp. 312-320; and Edward Denison, Accounting for United States Economic Growth, 1929-1969 (The Brookings Institution, Washington, 1974).

6 See Dale Jorgensen and Zvi Griliches, “The Explanation of Productivity Change”, Review of Economics and Statistics, Vol. 34, July 1967, pp. 249-280; and Chris Dougherty and Dale Jorgensen, “International Comparisons of the Sources of Economic Growth”, American Economic Review, Vol. 86, May 1996, pp. 25-29.

7 A recent contribution on this issue is N. Sakurai, E. Ioannidis, and G. Papaconstantinou, “The Impact of R&D and of Technology Diffusion on Productivity Growth: Evidence from Ten OECD Countries in the 1970s and 1980s”, STI Working Papers 1996/2, OECD, Paris.

efficiency and convenience with which they were provided, and yet measured gains in productivity tended to be small.[8]

With the release of the World Bank study *The East Asian Miracle: Economic Growth and Public Policy* in 1993, the debate that had raged over the U.S. productivity growth data shifted to an Asian context. Table 1 presents the World Bank's findings for the contribution of TFP to growth in seven developing and newly industrialized APEC member economies. As can be seen, in this set of estimates, TFP is found to have accounted for between 18.6 percent and 60.7 percent of growth in this sample. The average for the seven was 42.6 percent. By comparison, for the time period 1960-1989, Japan's annual average growth was 5.9 percent; of this, 3.5 percentage points, or nearly 60 percent of the total growth, was accounted for by TFP growth.[9]

Table 2.1
The Contribution of Technical Change to Economic Growth in Some Developing APEC Member Economies

Economy	TFP Growth 1960-1990	GDP Growth 1960-1992	The Contribution of TFP to GDP Growth (percent)
Hong Kong, China	3.6	6.2	58.8
Indonesia	1.3	3.7	33.9
Korea	3.1	6.7	46.3
Malaysia	1.1	4.4	24.4
Singapore	1.2	6.4	18.6
Chinese Taipei	3.8	6.2	60.7
Thailand	2.5	4.5	55.5

Source**:** The World Bank, The East Asia Miracle: Economic Growth and Public Policy, 1993.

Krugman's questioning of these results in his well-known 1994 *Foreign Affairs* paper, which was based on Alwyn Young's detailed numerical analysis, launched this new round of the TFP debate. The APEC Economic Committee, in commenting on this debate in 1996, reached two conclusions: first, that measurement problems and data limitations make it difficult to calculate total factor productivity precisely; second, the "miracle" may have reflected the fact that the East Asian economies were able to

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[8] For a more detailed discussion on the issue, see, for example, Erik Brynjolfson and Lorin Hitt, "Is Information Systems Spending Productive? New Evidence and New Results," Sloan School, MIT, Working Paper No. 3571-93.

[9] World Bank (1993), *op. cit.* The APEC Economic Committee study, Cost and Productivity Trends and Patterns of Specialization in APEC which is currently being prepared, provides an updated set of TFP estimates for APEC member economies. The findings are broadly similar to the World Bank's although the specific estimates of the trend TFP growth figures vary. This underscores the fact that the above figures are estimates and that methodological differences or choice of different time frames would yield somewhat different results.

achieve astonishingly high savings rates, and were able to invest those savings prudently, rather than somehow enjoying a total factor productivity "miracle."[10]

Bearing in mind the issues about the interpretation of results in this area, the appropriate inference to be drawn from the empirical literature would appear to be not that technological progress has been a relatively insignificant contributor to economic growth in those East Asian developing and newly industrialized economies with low estimated TFP growth, but rather that in these economies embodied technical change has probably been more important than disembodied technical change.[11]

The same arguments would of course hold true when drawing comparisons between developed and developing economies. Here, the essential role of human capital investment is particularly pronounced. Empirical studies show that poor economies tend to catch up with rich economies only if the poor economies have high levels of human capital per person; that is, economies with similar educational levels tend to converge among themselves.[12] This latter phenomenon is referred to as "conditional convergence".

In addition, research on convergence makes clear that the economies catching up with the United States most rapidly – for example Japan – had achieved a combination of rapid growth of TFP, relatively high rates of growth of physical capital and relatively high and growing investment in human capital. These three characteristics all seem to be complementary features of economies that were rapidly and effectively incorporating advanced technologies.[13]

Notwithstanding the importance of technical change in driving long-term economic growth, standard neoclassical growth theory does not shed light on the mechanisms through which technical change occurs. It is accordingly of great policy interest and some theoretical urgency to delve into the question of what determines the rate and direction of technological progress and knowledge accumulation.

Endogenous growth theory argues that the output growth of a particular economy depends not only on the growth of its capital and labour, but also on the growth of its available knowledge stock. Therefore, developing economies differ from developed ones not only because they have less capital but also because they have less knowledge,

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[10] APEC Economic Committee, 1996 APEC Economic Outlook, APEC Secretariat, Singapore, 1996; p. 98

[11] This argument is made in Edward K. Y. Chen, "The total factor productivity debate: determinants of economic growth in East Asia", Asian-Pacific Economic Literature, Vol. 11, No.1, May 1997.

[12] See Baumol, Batey, and Wolff (1989); also see Robert Barro, "Economic Growth in a Cross Section of Economy", Quarterly Journal of Economics, May 1991. The cross-economy evidence does not generally support the hypothesis originating in neoclassical growth theory that poor economies will tend to grow faster than rich economies (unconditional convergence). This finding accords with Robert Lucas Jr., "On the Mechanisms of Economic Growth," Journal of Monetary Economics, July 1988.

[13] Richard Nelson, "How New is New Growth Theory", Challenge, Vol. 40, No.5, September/October 1997.

which is the so-called "knowledge gap".[14] Here, the term "knowledge" encompasses all forms of management and technical know-how, and the institutional arrangements that facilitate interaction between economic agents.

Endogenous growth theory and other research work suggest that knowledge accumulation and technological innovation have at least three sources: learning by doing, R&D, and imitation or "spillovers."

Learning by doing

Learning by doing is reflected in the fact that production costs tend to decline as workers and managers gain experience with, and become more skilled at, applying particular production processes. This is captured in the so-called "learning curve", which represents the decline in long-term average costs as production accumulates. Learning by doing is one of the mechanisms emphasized by new growth theorists.[15] By incorporating the learning-by-doing mechanism, studies by these researchers have shown that, even if there are constant returns to scale at the firm level, there can be increasing returns to scale at the aggregate level, and that the marginal productivity of capital does not decline with increasing GDP per capita.

This is an important finding for the present discussion because it highlights one of the issues facing all developing economies: namely that convergence is made all the harder since the already developed economies, by being first on the learning curve, in some sense entrench their advanced position through this mechanism.[16]

Research and development (R&D)

A second mechanism emphasized by the new growth theory attempts to capture the fact that modern economies are characterized by extensive research and development activity that is aimed solely at technological innovation. Here the literature assumes that there is a separate technology sector in the economy that supplies the other sector(s) with new technologies.[17] In these models, one of the key determinants of the rate of economic growth turns out to be the amount of resources devoted to R&D. Many studies have found that the rate of return on R&D is high, and that it is much

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[14] See World Bank, World Development Report: Knowledge for Development, Oxford University Press, September, 1998, for a detailed discussion on the issue.

[15] See Paul Romer, "Increasing Returns and Long-run Growth," Journal of Political Economy, October, 1986; Robert Lucas Jr., "On the Mechanisms of Economic Growth," Journal of Monetary Economics, July, 1988; and Maurice Scott, A New View of Economic Growth, Clarendon Press, Oxford, 1989.

[16] There is a fairly extensive literature on the question of whether being first into a field provides a lasting advantage to firms and/or economies. The issue of path dependence has also been developed by Brian Arthur in his work on increasing returns. See Brian Arthur**,** Increasing Returns and Path Dependency in the Economy, University of Michigan Press, Ann Arbor, 1994.

[17] See for example Paul Romer (1990), *op cit.*; Gene Grossman and Elhahan Helpman (1991), *op cit.*; and Philippe Aghion and Peter Howit, "A Model of growth through Creative Destruction," Econometrica, March 1992. 1992.

higher than the rate of return on investment in structures, machines and equipment.[18] A review of the literature found that, at both firm and industry levels, the rate of return on R&D is above 15 percent for most of the studies reviewed[19].

Virtually all R&D activity is concentrated in the industrial economies.[20] In the APEC region, the economies that undertake the most R&D allocate between 2 and 3 percent of real GDP to this activity. However, the way in which R&D is conducted, the types of firms and industries that engage in it, the sources of funding and the areas of principal focus vary considerably from economy to economy.[21]

It has been found that different R&D strategies generate different growth performance. In order to assess the contribution of R&D input to economic growth in Australia, Peter Sheehan *et al*[22] generated two R&D projections for the time period 1997-2003, a base projection in which the annual growth rate of R&D input is 4.2 percent, and a more optimistic projection in which the growth rate is 9.0 percent. Based on the estimated return to R&D by the Australian Industrial Committee, the estimated incremental effect to long-term economic growth in the base case projection is 0.56 percent, and the incremental effect in the more optimistic projection is 1.40 percent, about 0.8 percentage points higher than the former.

These findings highlight several issues of importance to the discussion here. First, R&D is important but also expensive, and incentives must accordingly be in place to stimulate this essential wealth-generating activity. Hence the case for strong intellectual property rights (IPR) protection for innovations.[23]. At the same time, IPR regimes remove the public good characteristic of knowledge, reducing in the short term the potential impact of advances in knowledge on economic growth. As always, the issue boils down to one of trade-offs: i.e., how long to provide strong patent protection in order to make it worthwhile for R&D to be undertaken and to allow innovative firms to

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[18] See Zvi Griliches, "Productivity, R&D, and the data constraint", American Economic Review, Vol. 84 No. 1 (March 1994), pp. 1-23.

[19] See National Science Board, Science and Engineering Indicators 1996, Washington DC: US Government Printing Office, 1996, Text table 8-1.

[20] In 1990, the industrial economies accounted for 96 percent of total world R&D expenditure. See UNESCO, Statistical Yearbook, Paris, 1993.

[21] See John W. Clarry, "Innovation and National Competitive Advantages in Global Competition", in Shaker A. Zahra and Abbas J. Ali Editors, The Impact of Innovation and Technology in the Global Marketplace, International Business Press, Binghampton, N.Y., 1994, pp. 37-76. Also see Michael E. Porter, The Competitive Advantage of Nations, Free Press, New York, 1990.

[22] P. J. Sheehan, Nick Pappas, Galina Tilhomirova, and Paul Sinclair, "Australia and the Knowledge Economy: An Assessment of Enhanced Economic Growth through Science and Technology", Centre for Strategic Economic Studies, Victoria University, 1995.

[23] In relatively high technology industries, strong IPR regimes have a significant effect on the amounts and types of technology transfer and foreign direct investment that economies receive See Edwin Mansfield, "Intellectual Property Protection, Direct Investment, and Technology Transfer: Germany, Japan and the United States." International Finance Corporation Discussion Paper 27, 1995.

reap the benefit of their endeavours, while not unduly extending the period before such knowledge can be put to wider use domestically and internationally.[24]

Because R&D is expensive, and indeed often prohibitively so for developing economies, the latter tend to emphasize the acquisition of technology rather than its development. While this undoubtedly makes sense for them in the first instance, their very low rate of participation in R&D suggests that there might be scope for targeted economic and technical cooperation to accelerate the development of their capacity to participate more fully in this activity which is so instrumental in longer-term growth.

Imitation or Spillover of Technology

The scope for imitation to serve as a mechanism for technological change stems from the "non-rivalry" or public good characteristic of knowledge: i.e., the fact that its use by one entity does not preclude its use by another. The pre-condition for imitation to work in this fashion is that there be "spillover of technology".

The term "spillover of technology" refers to the commonly observed instances where technical innovation by one firm or economy (through learning-by-doing and/or R&D) prompts innovation by other firms or economies that enhance the productivity of the latter.[25] This can work through various vehicles such as demonstration effects, competitive pressures and so forth. While imitation is seen in all economies, this mechanism is clearly much more important for developing economies given the comparatively low levels of R&D investment – and the fact that imitation is much cheaper than development.[26]

Spillovers of technology can be divided into two categories, learning-by-doing spillovers and R&D spillovers (examples of which are described in Box 2.1). Both forms are important.

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[24] This issue was discussed in some detail at the Economic Committee's 1998 APEC Economic Outlook Symposium. The conclusion reached at that time was that hard and fast conclusions about the optimal length of patent protection could not be drawn. The issue turned on the nature of the industry and the behaviour of firms seeking patents; in particular, it has been found that in some instances, firms seek patents not to pursue innovation but to pre-empt innovation by others. See, APEC Economic Committee, Proceedings of the 1998 APEC Economic Outlook Symposium, APEC Secretariat, Singapore (forthcoming).

[25] This mechanism is incorporated implicitly into the new growth theory by the specification of the production function of knowledge. See, for example, Romer (1986, 1990) and Grossman and Helpman (1991).

[26] Canada also benefits extensively from spillover effects from the United States, reflecting the close industrial ties with U.S. firms. See Jeffrey L. Bernstein, "Inter-Industry and U.S. R&D Spillovers, Canadian Industrial Production and Productivity Growth", Industry Canada Working paper No. 19.

BOX 2.1: Technological Spillovers across Economies

North-South R&D Spillovers[27] **:** It has been shown that the rate of return on R&D is not only high in the economies undertaking the R&D, but that significant benefits are also derived by these economies' trading partners.[28] A study of the extent to which less developed economies that undertake little R&D themselves benefit from R&D performed in the industrial economies finds that R&D spillovers from industrial economies in the North to the less developed economies in the South are substantial, and that total factor productivity in developing economies is positively and significantly related to R&D in their industrial economy trading partners.[29] On average, a one-percent increase in the R&D capital stock in industrial economies raises output in developing economies by 0.06 percent. These estimates suggest that, in 1990, the total spillover effect from R&D in industrial economies may have boosted output in the developing economies by US$ 22 billion.

Learning-by-doing Spillovers in the Semiconductor Industry[30] **:** Using quarterly, firm-level data from the U.S. and Japan on seven generations of dynamic random access memory semiconductors over 1974-1992, Irwin and Klenow find that:

1) learning rates average 20 percent (i.e., unit production costs fall by 20 percent) every time cumulative output doubles;
2) firms learn three times more from an additional unit of their own cumulative production than an additional unit of another firm's cumulative production; and
3) learning spills over just as much between firms in different economies as between firms within a given economy.

Corresponding to the three mechanisms for technological progress described above, the rate and focus of technological progress at the national level will depend on:

1. the efficiency of learning-by-doing or the learning rate;
2. the amount of investment in R&D and the efficiency of this investment;
3. the capacity for imitating and absorbing "new technology"; and
4. the degree of the diffusion of foreign new technology, which is the external condition of imitation.

The attempts to systematically deal with these factors have led to the analysis of economies as separate technological systems, each with their own dynamic, and to the development of the concept of the "National Innovation System" as a means to analyze

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27 David T. Coe, Elhahan Helpman and Alexander W. Hoffmaister, "North-South R&D Spillovers", The Economic Journal, Vol. 107, No. 440, 1997.

28 David T. Coe and Elhanan Helpman, "International R&D Spillovers", Eastern European Economic Review, Vol. 39, May 1995.

29 David T. Coe, Elhahan Helpman and Alexander W. Hoffmaister (1997) *op. cit.* The industrial economies refer to 21 OECD economies plus Israel; the less developed economies include 77 economies. Most APEC members are included in the study.

30 Irwin, D. and Klenow, P., "Learning-by-doing Spillovers in the Semiconductor Industry", Journal of Political Economy, Vol. 102, No. 61, 1994.

the process of technical change.[31] Underpinning this approach is the recognition that technology is "embedded" in organizational structures (firms, networks, institutions, etc.) and that technological change is the joint outcome of innovation and learning activity within organizations, especially firms, and interaction between these and their environment. Therefore, a comprehensive approach must be taken to this issue, along the lines espoused by the National Innovation System approach, to which we now turn.

2.3 Assessing innovative capabilities of APEC member economies: The *National Innovation System* approach

The concept of the National Innovation System, which was first articulated by Christopher Freeman, has been developed and used as a broad framework to study the innovative capabilities of different economies and regions.[32] The concept has been used in a variety of ways, according to the specific purpose of particular research. Freeman defined the National Innovation System as "the network of institutions in the public and private sectors whose activities and interactions initiate, import, modify and diffuse new technologies."[33] By comparison, Lundvall defined it somewhat more broadly as "all parts and aspects of the economic structure and the institutional setup affecting learning as well as searching and exploring."[34] Patel and Pavitt offered another, slightly different definition: "the national institutions, their incentive structures and their competencies, that determine the rate and direction of technological learning in a country."[35]

There are two features that distinguish the National Innovation System approach. First, it considers the innovative capabilities of an economy systematically. In particular, it pays close attention to the features of economies that give innovative activities distinctively national characteristics. These include, *inter alia,* economies':

- historical patterns of industrial and scientific specialization,
- institutional structure and the respective roles of public, non-profit, and for-profit institutions in shaping the innovation process and outcomes,
- size of economy and stage of development; and
- political, legal, regulatory and cultural frameworks.[36]

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[31] Richard R. Nelson (ed.) National Systems of Innovation: A Comparative Study, Oxford University Press, New York, 1992.

[32] See Christopher Freeman, Technology and economic performance: lessons from Japan, Pinter, London, 1987; also Bengt-Ake Lundvall, (ed.) National Innovation Systems – Towards a Theory of Innovation and Interactive Learning, Pinter, London, 1992; and Nelson (1992), *op. cit.* Recently, the OECD has been studying National Innovation Systems to evaluate and compare the main channels for knowledge flows at the national level, identify bottlenecks, and make policy recommendations. See OECD, "National Innovation Systems: Analytical Findings"; and "National Innovation Systems: Policy Implications", Working Papers on Innovation and Technology Policy, OECD, June 1998.

[33] Freeman (1987), *op cit*.

[34] Lundvall (1992) *op cit.*

[35] P. Patel and K. Pavitt (1994), *op cit.*

[36] This follows for the most part the OECD's taxonomy. See OECD (1998), *op. cit.*

The following discussion benchmarks APEC member economies' R&D activity and capacity in the context of the above framework.

Intensity of R&D investment in the APEC region

Table 2.2 shows the intensity of R&D investment in APEC member economies.

Table 2.2
R&D/GDP and GNP/Capita of APEC Member Economies

Economy	R&D to GDP Ratio		GNP per Capita
	1990	1995	1994
Korea	1.88	2.71	10,330
Japan	2.76	2.70	21,140
USA	2.73	2.52	25,880
Chinese Taipei	1.62	1.79	11,597
Australia	1.38	1.62[2]	18,120
Canada	1.46	1.59	19,960
Singapore	0.84	1.13	21,900
New Zealand	0.99	0.94	15,870
Chile	0.57	0.76[2]	8,890
Russia	2.03	0.73	4,480[4]
China	0.70	0.50	2,510
Indonesia	n.a.	0.50	3,600
Malaysia	n.a.	0.34[3]	8,440
Mexico	n.a.	0.32[2]	7,040
Thailand	0.19[1]	n.a.	7,540[4]
Philippines	0.15	n.a.	2,740
Peru	n.a.	0.003	3,770[4]
Vietnam	n.a.	n.a.	240[5]

Notes:
1) 1991; 2) 1993; 3) 1994; 4) 1995; 5) in US dollars. GNP per capita is in US$ at PPP Exchange Rates. Rankings are based on R&D/GDP in 1995 or in the latest year for which data are available.
Sources: GNP per capita: World Development Report, 1996. Other data: APEC/PECC, Pacific Science and Technology Profile, 5th issue, 1997; Greg Tegart, "The Asia-Pacific Ascendancy", Discussion Paper No., 1997, Australian Network for Research and Technology Policy, University of Canberra; and Guillermo Cardoza, "Learning, innovation and growth", Science and Public Policy, Dec. 1997, 377-393.

From the data, one can divide APEC member economies into three groups: those with R&D investment over 2.5 percent of their GDP (Korea, Japan and the USA); those with R&D investment between 1.0 to 2.0 percent of their GDP (Chinese Taipei, Australia, Canada and Singapore); and those with R&D investment lower than 1.0 percent of their GDP. While higher per capita incomes tend to be associated with higher and growing intensity of R&D activity, the relationship is nonetheless loose. One exception is Peru whose R&D intensity is particularly low (0.003 percent) in light of its GDP level. The dramatic change in Russia is also noteworthy where R&D to GDP ratio dropped from 2.03 in 1990 to 0.73 in 1995.

When R&D is considered by sector of performance, Table 2.3 shows that, in developed and newly industrialized economies, such as USA, Japan, Korea, Singapore and Canada, business enterprises tend to dominate. This is also true for Russia.

Table 2.3
Percentage of R&D Expenditure by Sector of Performance

Economy	Business		Higher Education		Government		Non-profit	
	1990	1995	1990	1995	1990	1995	1990	1995
Australia	40.2	47.0[4]	25.5	24.6[4]	32.6	26.5[4]	1.6	1.9[5]
Canada	54.0	54.0[3]	25.0	26.0[3]	20.0	20.0[3]	n.a.	n.a.
Chile	10.2	20.0[5]	40.6	45.8[5]	42.1	33.9[5]	n.a.	0.3
China	27.4	31.9	12.1	13.7	50.1	44.0	n.a.	n.a.
Indonesia	33.0[5]	n.a.	n.a.	n.a.	62.0[1]	n.a.	n.a.	n.a.
Japan	76.7	71.2	11.6	14.2	7.8	10.2	3.9	4.3
Korea	70.9	73.1	7.3	8.2	3.5	3.5	18.3	15.2
Malaysia	44.7[2]	n.a.	9.2[2]	n.a.	46.1[2]	n.a.	0.0	n.a.
New Zealand	28.2	28.3	27.9	27.5	43.9	44.2	n.a.	n.a.
Philippines	21.8[2]	n.a.	14.7[2]	n.a.	58.8[2]	n.a.	4.7[2]	n.a.
Russia	n.a.	68.5	n.a.	5.4	n.a.	26.1	n.a.	0.02
Singapore	54.0	64.5	21.0	14.2	17.0	8.1	8.0	13.3
Chinese Taipei	52.8	52.9	13.2	14.0	17.3	16.2	17.0	17.0
Thailand	5.0[1]	7.3	20.2[1]	36.0	65.3[1]	48.8	5.1[1]	3.6
USA	72.0	72.0	13.9	15.3	10.6	9.2	3.1	3.4

Notes:
1) 1991; 2) 1992; 3) 1993; 4) 1994; 5) 1996.
Source: APEC/PECC, Pacific Science and Technology Profile, fifth issue, 1997.

As Table 2.3 also shows, in developing economies, government and public institutions often play the more important role; this is true, for example, in Thailand, China and Chile. However, these are not universal patterns; in New Zealand for example, government and public institutions play the more important role in this developed economy. From 1990-1995, consistent with the global trend towards a reduced role for government in economic affairs, government spending on R&D generally decreased in the region over the period, although Japan and New Zealand were exceptions to this trend.

Economies also differ in terms of the role played by different kinds of firms in the innovation process. In Korea, the large *chaebol* have since the 1980s dominated the innovation process while in Chinese Taipei innovation has been led by small firms[37].

Source of Funding

When R&D activity is considered by source of financing, as shown in Table 2.4, there is a broad tendency for government-funded R&D to be comparatively lower in industrialized economies, where firms have developed the capacity to support R&D projects themselves. A few developing economies (Indonesia and Mexico) have a very high proportion of R&D funded by government. However, there are exceptions in both directions.

Linkages within and between sectors within economies

The innovative performance of an economy depends in part on how business enterprises, universities and research institutes, and the people within them, interact with one another as elements of a collective system of knowledge creation, diffusion and application.[38]

One important set of linkages is among firms. OECD research suggests that firm networking is important since collaborative firms tend to be more innovative than others. Such networking tends to be based on trust and results in durable links, including with knowledge-intensive service firms. This is not unrelated to "clustering" where local regions within an economy become centers of innovation through the presence of groups of innovative firms that attract skilled personnel and foster the kind of networking that leads to rapid transmission of ideas and feeds the innovative process.[39]

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[37] See, for example, Michael Hobday, Innovation in East Asia: The challenge to Japan, Edward Elgar Publishing, Inc., 1995.

[38] See, for example, OECD, 1997 and 1998, *op. cit*.

[39] *ibid*. Also see Robert D. Putnam, "Bowling Alone: America's Declining Social Capital", Journal of Democracy, Vol. 6, No. 1, January 1995. Putnam makes the case that it is the informal networking of individuals in areas such as Silicon Valley and Benetton Valley that builds the trust and engagement that facilitates practical cooperation.

Table 2.4
Gross Domestic Expenditure on R&D by Source of Funding

Economy	Gross Domestic Expenditure on R&D	Total Financed by Government	Share financed by Government
	Billions of local currency units		Percent
Australia	7.4[2]	3.6[2]	49
Canada	12.4	3.9	32
Chile	187.6	123.9	66
China	28.6	14.3	50
Hong Kong, China	0.9	0.5	56
Indonesia	212.1	181.9[2]	86
Japan	131.9	28.7	22
Korea	9,440.6	1,780.9	19
Malaysia	0.6[2]	0.7[2]	27
Mexico	3.6	2.9	80
New Zealand	0.8	0.5	54
Peru	0.004	n.a.	n.a.
Russia	12,149.5	7,350.4	60
Singapore	1.4	0.4	31
Chinese Taipei	125.0	55.8	45
USA	178.6	62.5	35

Notes:
1) 1993; 2) 1994; 3) 1996.
Source: APEC/PECC, Pacific Science and Technology Profile, fifth issue, 1997, and China Science and Technology Indicators-1996, third issue, 1997.

A second set of key linkages is between university and industry. The extent of these types of linkages varies from economy to economy and may depend on the institutional setting in which universities and business find themselves.

An interesting example is provided by the developments in this regard in the United States over the past two decades. Prior to 1980, American universities together were granted on average fewer than 1 percent of total U.S. patents annually. Since 1980, however, this figure has increased quite substantially to about 2.5 percent and appears to be on a continuing gradual upward trend. Richard Nelson argues that a key development was the Bayh-Dole Act of 1980, which allowed universities to retain intellectual property rights pertaining to results of government-funded research. Following this legislation, the universities were expected to aggressively patent and license in order to give incentives for commercial applications. This, together with key changes to intellectual property rights legislation bearing on computer software and biotechnology (areas where a considerable share of university patenting takes place), a shift by governments to fund research that was of interest to business (through involvement of business in the project selection process) and increased interest from business in "piggybacking" on university-based research, all combined to generate a rapid growth in university-business linkages.[40] This has also become one of the express purposes of U.S. government technology policy – for example, through the Manufacturing Extension Partnership program mentioned earlier.[41]

China has also been moving to increase university-business and research institute-business links. Here, a key development was the 1985 reforms that cut government funding to universities and public research institutes, forcing them to seek out partnerships with industry or to otherwise obtain funding from the private sector in order to survive. As a result, since 1993, universities in China have received more funding from industry than from government and developed stronger linkages with industry.[42] The same holds true for public research institutes in China.

Indices of Innovative Activity

Academic papers and patents are the most widely used indicators of R&D performance although they are, at best, proxies. Table 2.5 shows the number of academic papers published from 1988 to 1993 in APEC member economies and the proportion of these that involved international collaboration.

As can be seen, academic papers published in APEC member economies account for half of the global total, with a dominant position held, not surprisingly, by the United States. This is a function of both the relative size and relatively advanced stage of development of the U.S. and of the orientation of economies in East Asia such as Japan and Korea towards applied research rather than basic research. It is also interesting to note that the two economies that contribute the major share of academic papers, namely the U.S. and Japan, have the lowest rate of international co-authorship.

Table 2.5
Academic Papers by Source Economy and Authorship, 1988-1993

Source	Number of papers	Share of multi-authors	International co-authorship

[40] See Industry Canada, "Richard R. Nelson Explains the Universities' License to Patent", Micro, Vol. 5, No. 2, Summer 1998.

[41] See David Mowery, The U.S. National Innovation System: Recent Developments in Structure and Knowledge Flows, 1997. Mowery reports that, during the period 1985-1994, more than 450 research joint ventures between universities and industry were created.

[42] Xielin Liu and Steven White, National Innovation system of China in Transition, Working Paper, Research Center for Innovation, Strategy and Management, Ministry of Science and Technology, Beijing, 1998.

USA	908,125	53	14
Japan	219,280	46	11
Canada	120,454	53	25
Australia/NZ	69,393	47	22
China	30,437	49	27
East Asian NIEs	29,846	50	23
Other Asia Pacific	14,499	61	44

Sources: U.S. National Science Foundation, 1996; OECD Secretariat calculations (OECD 1997, *op. cit.*)

Tables 2.6 and 2.7 provide some information on the extent of patenting activity in the APEC member economies. From Table 6, it can be seen that, in ASEAN, the share of patent applications accounted for by residents ranges, in the case of all categories of patent application from a high of over 38 percent in the Philippines – which approaches the OECD average of 41 percent – to a low of only a little over 6 percent in Malaysia. Overall, the ASEAN average is about half that of the OECD average.

Table 2.6
Summary of National Patent Applications and Grants in ASEAN, 1992

Economy	Indonesia	Malaysia	Philippines	Thailand	ASEAN	OECD
National Patents: Total Applications: All Categories (No.)	774	2,388	3,050	2,921	9,133	1,250,596
By residents (No.)	113	151	1,186	342	1,792	518,052
By non-residents (No.)	661	2,237	1,864	2,579	7,341	732,544
Resident share (%)	14.6	6.3	38.9	11.7	19.6	41.4
National Patents, Total Applications: Invention only	370	2,346	1,820	2,250	6,786	
By residents (No.)	6	113	133	68	320	
By non-residents (No.)	364	2,233	1,687	2,182	6,466	
Resident share (%)	1.6	4.8	7.3	3.0	4.7	

Source: ASEAN Secretariat, Science and Technology Indicators in ASEAN, September 1997.

Resident shares are even lower in the case of patents for inventions only. This is consistent with the general perception that the developing APEC member economies in Southeast Asia, although having gone through a period of rapid economic development, did so by relying on outside sources of modern technology.

As shown in Table 2.7, some of the newly industrialized East Asian APEC member economies, notably Korea and Chinese Taipei, have made great progress in developing their innovative capabilities.

Table 2.7
External Patents granted by the USA Patents Offices, 1980-1993

Economy	Computing and Electronics			All other manufacturing		
	1980	1986	1993	1980	1986	1993
Japan	1,343	3,181	7,193	5,781	10,028	15,099
Korea		3	414	8	42	365
Chinese Taipei	6	17	217	59	326	927
China			8	1	9	53
ASEAN			28	6	12	64
Australia	17	20	35	248	354	343
Total non-U.S.	3065	5477	10,546	21,400	27,257	34,651

Source:
Greg Tegart, "The Asia-Pacific Ascendancy", Discussion Paper No.3, 1997, Australian Network for Research and Technology Policy, University of Canberra, p. 28.

Patterns of Acquisition of Technology

Technology can be either acquired or developed. As shown in Table 2.8, which documents the growth in U.S. receipts of royalties and license fees over the period 1987-1993, Asian economies have been far more active in acquiring new U.S. technology through licensing than have economies in other regions around the globe. Within Asia, Japan has been by far the most active but the newly industrialized economies of Korea and Chinese Taipei have rapidly increased their acquisition of technology through this means.

The other route, of course, is to develop technology domestically, a path that most emerging market economies in the APEC region have in fact followed. One indicator of success here is the increased share of exports coming from computers and electronics (C&E). Table 2.9 reviews growth in C&E exports of some of the Asian APEC member economies. While the rapid growth of C&E exports from the region during the 1980s and first half of the 1990s testifies to the success of this strategy, this same success has also made these economies vulnerable to price-cutting in these highly competitive, rapidly evolving and cyclical sectors. For example, the price of 16-megabyte DRAM chips fell from US$50 in late 1995 to below US$10 at the end of 1996, squeezing profitability of Korean firms specialized in their production.[43]

[43] See Tegart (1997) *op. cit.*

Table 2.8
U.S. Receipts of Royalties and License Fees, 1987-93: By Region
(US$ million)

Economy/Region	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Asia Total: of which	936	1,185	1,248	1,465	1,638	1,705	1,932
- Japan	723	883	897	1,028	1,219	1,268	1,392
- Korea	34	107	167	249	225	220	287
- Chinese Taipei	21	46	34	55	57	42	40
- Singapore	30	13	8	19	21	20	20
Other Regions: Of which							
- Europe	446	517	530	630	575	637	615
- Latin America	64	48	54	59	85	73	n.a
- Africa	n.a	22	24	22	34	27	35

Source: U.S. National Science Foundation, 1996.

Table 2.9
Indicators of Growth in Computer and Electronics Sectors:
Selected Asian Economies, 1980-1995

Economy	**C&E Share of Total Exports of Manufactured Goods**				**Average growth in C&E exports**
	1980	1985	1990	1995	1980-95
Singapore	19.3	24.5	40.8	57.3	22.6
Malaysia	19.3	27.7	39.6	51.1	24.9
Chinese Taipei	14.2	15.0	22.1	33.0	17.6
Korea	11.7	13.9	24.6	31.0	21.9
Thailand	2.2	2.8	19.0	24.1	38.9
Hong Kong, China	13.9	14.7	17.1	19.7	7.8
China	0.6	2.1	9.5	14.2	48.4
Indonesia	3.3	2.6	1.1	8.7	23.8

Source: David Ray, "Innovation and growth in the Indonesia Economy", Ph.D. Dissertation, Centre for Strategic Economic Studies, Victoria University of Technology, 1998.

Generally speaking, there is evidence of progression from acquisition of technology to its development. Some economies, for example Korea and Chinese Taipei, through "learning by doing" and a "reverse brain drain", have developed considerable R&D capacity and begun to manufacture products of original design to meet requirements of their customers. One commentary noted: "Rather than handing over a design and asking for it to be banged together, buyers now tell the supplier what they want the product to do and then ask the manufacturer to make something that can do those things. Business relationships are evolving onto cooperative partnerships with increasing levels of design input from the manufacturer." [44]

Government Policy Frameworks

National R&D policies, including policies governing science and technology and industrial development, form an integral and important component of national innovation systems. However, a range of other policies also affect innovative activity and capacity, including policies with respect to education, investment, legal frameworks (including for intellectual property rights), tax and finance. In recognition of this, governments the world over are considering how best to frame these policies. This has resulted in many governments articulating comprehensive policies governing innovation – and in many cases undertaking significant reforms to improve the way that their economies function in this respect. As a full survey of national S&T policies within the PECC-APEC region has already been provided by PECC,[45] the discussion here will limit itself to drawing out a few key points.

One very broad way in which government technology policies can be classified is according to whether they are relatively more "mission oriented" or "diffusion oriented".[46] The former features a greater degree of government support for mission-oriented research activities and tends to cover a limited set of technologies. The latter emphasizes the diffusion of broad technologies.

The United States is an example of an economy that pursued, at least until recently, a "mission oriented" technology policy. Since World War II, the U.S. government invested heavily in mission-oriented R&D (primarily defense) and to support basic research without great concern to its direct commercial applications. This mission-oriented policy was reexamined under the increased technological competition from Japan and Europe Union. A new and more activist federal policy designed to promote commercial high technology has emerged. In 1993, A National Science and Technology Council, chaired by the President, was created. The following year, the Administration issued two reports titled "Science in the National Interest" and

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[44] Asia Business, January 1995, p.30.

[45] The Pacific Economic Cooperation Council (PECC) Science and Technology Task Force has compiled an overview of science and technology policies. See PECC, Pacific Science and Technology Profile, third edition, 1994.

[46] Ergas, Henry, "Does Technology Policy Matter?" in Bruce R Guile and Harvey Brooks, "Technology and Global Industry: Companies and Nations in the World Economy", National Academy Press, Washington DC, 1987.

"Technology in the National Interest" which provided the first post-cold war review of national S&T policy, with the purpose of maintaining U.S. leadership across the frontiers of scientific knowledge. The U.S. government is committed to the belief that science and technology are critical to the nation's future economic growth. U.S. S&T policy seeks to create a climate that fosters private-sector innovation and commercialization, and facilitates the rapid deployment of civilian technology. It seeks to build a 21st century infrastructure, maintain strong support for basic science, support science and technology education, and promote international economic development and trade through international collaboration. It also promotes partnerships among government, industry, and academia. Examples of specific programs and measures that promote R&D in the private sector include the Research and Experimentation Tax Credit, the Environmental Technology Partnership, the Advanced Technology Program, the manufacturing Extension Partnership.

Japan, on the other hand, has historically followed the "diffusion-oriented" technology policy. The famous example here, of course, is the transistor radio. Japan focused its attention on accelerating the diffusion and application of imported technology, such as the transistor technology obtained from the United States. Japanese firms succeeded in developing a transistor radio receiver which was portable, power saving, and perhaps most importantly cheaper than electronic-tube-based radio receivers. This gave Japan a competitive edge over other economies in this field and a model for further development. Japan echoed its success in this field many times over during the postwar era to advance to the position of the world's second largest economy.

Technology policies in other economies, such as that of China, have also undergone major changes.[47] Traditionally, the Chinese government played a very important role in its technological development by supporting heavily public R&D institutions, including the Chinese Academy of Sciences. However, this arrangement resulted in the separation of R&D activities from the production process. In 1985, China started an on-going structural reform of its innovation system by reducing funding to public research institutes, pushing them to acquire funding from industry. At the same time, a three-tier science and technology development strategy was formulated and implemented. The first tier concentrates roughly two thirds of China's S&T capabilities and resources to directly serve China's economic development. At the second tier, a reasonable amount of China's R&D resources is devoted to high-tech development, while at the third tier, a small but strong contingent of scientists and engineers are deployed to work on the frontier areas of basic research.

In many cases, the stage of development of the economy is a key factor shaping government policy. For example, Korean science and technology policy has undergone significant transformations as Korea has progressed from a poor, rural agricultural economy to an industrialized export-oriented economy. During the early period of industrialization, in the face of increased demand for foreign technology, science and technology policies promoted technology imports. As domestic industries matured,

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[47] See, for example, Lan Xue, " historical perspective of China's innovation system reform: a case study" Journal of Engineering and Technology Management, 14 (1997), 67-81.

policy became "mission oriented" as it shifted to promoting development and diffusion of homegrown technology. Korea selected industries such as electronics and motor vehicles as strategic sectors and provided subsidies and credit to *chaebol* to implement these strategies. Though Korea's electronics industry became amongst the world's leaders under this policy, the *chaebol* also became heavily debt-burdened in the process and were hit very hard in the recent financial crisis. Science and technology policy in Korea has now begun to shift away from this mission orientation and to support the structural reforms Korea is now undertaking by promoting diffusion of scientific and technological knowledge throughout the economy.

As a broad generalization, the focus of national science and technology policies has in recent years shifted towards commercial applications, which has resulted in an increasing emphasis on the role of the firm in the process of innovation. Canada provides an example of conscious re-orientation of research activity towards commercial applications.[48] However, governments continue to play an important role in supporting pre-competitive research. Moreover, this is an area where international partnership amongst governments remains attractive both to spread the cost of projects and as a means of promoting technical cooperation.

In summary, the above analysis shows that:

- Different economies have different national systems of innovation, even within the same region
- Several East Asia economies have had notable success in significantly improving their innovation performance over the last several decades.
- All developing and newly industrialized economies in APEC region still rely heavily on technology imported from the United States and Japan.

This review of the current situation provides at least a partial information base for considering how APEC, through its program of economic and technical cooperation could facilitate the evolution of the national systems of innovation that, as the above has attempted to show, are at the heart of the ongoing transformation of APEC member economies into knowledge-based economies. This discussion is taken up below.

2.4 Economic and Technical Cooperation for Innovation: Rationale and Mechanisms

The trend towards economic and technological globalization has profoundly changed the landscape of the global economy. Inter-dependence has increased in many forms in the APEC region. While this has been well documented elsewhere, it is worthwhile to

[48] Industry Canada, Minding Our Future: a Report on Federal Science and Technology (1997). This report reviews progress on implementing *Science and Technology for the New Century: a Federal Strategy* which "sets a course for transforming federal science and technology investments to better meet both the challenges of a changing world economy and of the evolving social and physical environment. The Strategy also ensures that Canadians receive a good return on their S&T investment".

briefly summarize some of the most important channels through which inter-dependence has developed:

- It has now become commonplace for a product to be designed in one economy, manufactured in another, and sold in yet a third. This trend is deepening economic interdependence both globally and within the APEC region.
- Because of the high level of economic complementarity among individual APEC members, trade has been growing more rapidly within the region than between APEC members and the rest of the world.[49]
- Investment flows among APEC member economies have also grown rapidly. The inflow of foreign direct investment has been particularly important for the developing members of APEC to sustain their economic growth.[50]
- The integration of international financial markets has meant that economic turbulence can rapidly flow from economy to economy, as demonstrated in the currency instabilities that hit the APEC region in mid-1997.
- The rapid development of the information society as a result of the information technology and telecommunications revolutions has brought societies around the world into ever-closer contact, facilitating the rapid dissemination of knowledge and creating the basis for new commercial links through electronic commerce. This can only increase as a result of APEC's efforts to realize the development of the Asia Pacific Information Society and the supporting information infrastructure.[51]
- At the same time, some environmental problems have assumed regional and often global dimensions and their resolution requires concerted efforts of many economies, including at the regional and multilateral levels. Moreover, since environmental standards can *de facto* become a means for trade protection, the progress of economic integration creates pressure to harmonize trade-related environmental policies and standards across economies.

In short, APEC member economies are interdependent both economically and environmentally and, with the implementation of The Manila Action Plan for APEC (MAPA) and the deepening of the subregional trade arrangements and the growth triangles,[52] will become more so in the future.

At the same time, the gaps in development across the APEC region remain large. Moreover, with the transformation of the industrial economy into the "knowledge-based economy", economic growth is becoming more dependent on the rate of knowledge accumulation, diffusion, and application. Of importance for this discussion

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[49] In fact, between 1986 and 1996, the share of trade of APEC member economies with other APEC member economies, or the dependency ratio, increased from 68.8 percent to 71.6 percent for exports, and from 68.3 percent to 73.2 percent for imports. See APEC Economic Committee, The Impact of Trade Liberalization in APEC, APEC Secretariat, Singapore, 1997.

[50] For example, 91 percent of the FDI flows to China in 1979-96 came from other APEC member economies (Wang luolin, 1997).

[51] This development is described in APEC Economic Committee, Towards an Information Society: Developments within APEC, *op. cit*.

[52] This latter development is described in APEC Economic Committee, The Impact of Subregionalism on APEC, APEC Secretariat, Singapore, 1997.

is that this trend is far more advanced in the developed than in the developing regions as the result of their knowledge gap.

The pertinent question is: what implications should be drawn for APEC's economic and technical cooperation? To address this issue, the chapter next reviews the basic forms of technical cooperation that have come to be used in this area. It then briefly reviews APEC's general approach to economic and technical cooperation. Finally, against this background, it considers how APEC might strengthen its role.

Forms of technical cooperation

A range of approaches has evolved for technical cooperation in this field, with different approaches used depending on the level and type of technology involved and the nature of the partners – firms, research institutes, governments, or some mix of these.

<u>Technological alliance</u>

Technological alliances include joint firm R&D agreements and joint government R&D programs for bilateral or multilateral cooperation in undertaking R&D. Pursuant to these agreements, participants bring their specific capacities in particular technological areas to the alliance and share in the results of the collaboration. Such alliances are becoming important not only to SMEs but also many large firms, given the high cost of R&D.

An illustrative example of such a technological alliance is Image Quest Technology, a joint venture between Hyundai, the Korean industrial giant, and a group of leading American liquid crystal display (LCD) engineers spun off from Colory Inc. Hyundai invested more than $16 million in developing a 10.4-inch thin film transistor video graphic array (VGA) module prototype and setting up a pilot plant at Image Quest. The joint research brought Hyundai engineers, with their strong background in passive matrix LCDs and semiconductors, up to a par with Japanese competitors [53].

Governments have entered into technological alliances with other governments as well, typically through public research institutes. Such alliances tend to be in pre-competitive basic research and "big science".

<u>Technical training and service</u>

The development of technological capability is a costly and long-term process. Even in industries where mature technology is transferred, technical training and service can often be necessary to support the absorption by local workforces of technology being transferred. The usual means for such technical training is education abroad, staff training provided in a foreign-invested local firm or joint venture, or through employee

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[53] See Linsu Kim, Imitation to Innovation: the dynamics of Korea's technological learning, Harvard Business School Press, 1997, p. 145.

mobility within multinational corporations. Research exchange programs can also serve this purpose.

In this regard, it can be noted that Chinese Taipei's information industry, which now plays a significant role in the world, evolved largely through the growth of firms that were set up or managed by professionals who had received advanced education in the U.S. and other western economies, or who had previously gained experience in this field through R&D activity in multinational corporations.

Lately, firms in Chinese Taipei have begun to set up branches in many developed economies. Besides enabling them better to serve their customers and to promote their sales abroad, the branches help to recruit qualified R&D personnel in the developed economies. Hundreds of engineers with Chinese backgrounds located in Silicon Valley have joined the Jade Mountain Technology Association there. The purpose of this association is to match Chinese Taipei enterprises' demand for engineers with the supply of Chinese engineers in the United States and to provide information and assistance for Chinese Taipei enterprises' overseas mergers and acquisitions and outward investment projects.

Technology Transfer

As noted earlier, technology transfer is of particular importance to developing economies, given their limited capacity to develop new technology. However, all small economies, even those that do engage heavily in R&D, must import technology in a range of areas to complement what they themselves can develop with their limited resources. For example, Canada, which is one of the world's largest economies in terms of GDP, still is a major importer of technology. There are mainly two kinds of technology transfer, non-commercial and commercial.

Non-commercial technology transfer is predominantly aimed at developing economies and for the most part is effected through international agency aid programs. International agencies, such as the World Bank and various non-governmental organizations (NGOs) transfer technology through a number of mechanisms, including as part of direct aid, through the exchange of technological information, by supporting academic interchanges, by supporting participation at technology exhibitions and so forth. This channel is mainly used in areas where general benefits would obtain such as in agriculture and environmental protection.

The second and by far the more important kind of technology transfer is commercial. Such transfer generally must be seen by both parties as beneficial, if it is to take place. For the supplying company the incentive usually is to get around trade barriers or other impediments in a foreign economy. For the receiving company, it is a means to upgrade its technological position.

The usual mechanisms for commercial technology transfer are foreign direct investment (FDI) and joint ventures, technology licensing or outright purchase, technology consultation, subcontracting of original equipment manufacture (OEM), and overseas mergers and acquisitions.

Much technology transfer occurs through *foreign direct investment and joint ventures*. Multinational corporations play an influential role in the process. The transferred technology may be embodied in the equipment brought in for the manufacturing process, in the products themselves, or in the process management. Since 1979, one of the world's major recipients of technology transfer through this mechanism has been China, particularly through inward foreign direct investment, which has significantly increased since the 1979 reform. Many foreign companies have established manufacturing enterprises in China, introducing manufacturing technologies and management skills to the domestic economy as well as taking advantage of cheap labour resources and the huge local market. China's technology imports have greatly increased technology utilization and have had further significant positive impacts on both basic R&D expenditure and technological upgrading and innovation.

A *technology license agreement* permits the licensee to use patents, trademarks, know-how, and manufacturing processes of the licensor, in return for license fees or royalties. It often is tied into the purchase of capital goods that embody advanced technology. A variant of this is to simply purchase the technology by acquiring the production facility. China's TV industry has benefited from this mode of technology transfer. By the end of 1997, the annual production of color TV reached 20 million units in China. The leading Chinese producers started from assembling lines and imported CRT production lines. They gained production experience as well as design expertise in the process. Now these leading TV producers have established their own R&D team and begun to turn out new products with proprietary designs[54].

Technology consultation can also lead to technology transfer through the technology advice or training provided. Along with technology licenses and technical assistance, it has been a popular alternative as a source of technology for some time. Singapore has provided technical assistance to other economies since 1960s through bilateral and multilateral technical training programs. It covers a wide range of topics such as telecommunications, health and medicine, information technology, mechatronics, and others.

Recently, *subcontracting or original equipment manufacture* (OEM) has become an important vehicle for commercial technology transfer. Under these types of arrangements, the subcontractor manufactures the final products under the principal's brand name. This allows the transferring firm to take advantage of lower-cost factors of production abroad while retaining ownership. This has become an important form of technology transfer in industries such as garments and electronics. Because the principals depend on the subcontractor for quality, price and delivery of the final product, successful OEM arrangements sometimes involve the formation of a technical

[54] See Shiji Gao and Gang Xu, "To Learn to Innovate: Learning in Technological Progress and A New Production Paradigm in Developing Countries", paper presented at the 1998 APEC Outlook Symposium, Xiamen, China, May 16-17, 1998. See APEC Economic Committee, Proceedings of the 1998 APEC Economic Outlook Symposium, *op cit*.

relationship between the partners to ensure that quality standards are met. OEM often involves the foreign partner in selecting capital equipment, personnel training, finance and management. The development of the computer-software industry in Chinese Taipei is a typical example of such a relationship. To help develop the software industry in Chinese Taipei, the government-sponsored Institution for the Information Industry (III) agreed with IBM in 1983 to establish an entity called NDC. Under the agreement, NDC, supported by software engineers from III, provides exclusive software development and design services to IBM and to any joint projects of the two partners, while IBM pays both the NDC staff salaries and for all R&D equipment. During project development phases, NDC research staff members are frequently sent to IBM plants around the world to acquire needed expertise. At the same time, IBM's engineers are sent to guide the research operations. Under this alliance, NDC provides low-cost, high quality, but relatively inexperienced engineers to the foreign partner. In return, the foreign partner provides NDC with its vast knowledge in software research and development which has served to upgrade Chinese Taipei's technical capacity, to speed its software industry's maturation process and to provide an impetus to Chinese Taipei's economic growth.

Finally, in recent years *overseas mergers and acquisitions* have become more frequently used as a way to acquire technology and diversify internationally. The advantage of such moves is that they bring with them existing sales networks, brand names and resources. Often the key objective of the merger or acquisition is to gain access to a key technology possessed by the target firm. One example of this was the acquisition of American Bridge Inc. of the United States by the Continental Construction Company in Chinese Taipei, a deal that enabled the latter to acquire needed construction technology. Another example was the acquisition of Comsat Inc.'s marine telecommunications branch by MTI in Chinese Taipei, which aimed to use the technology to set up an integrated satellite communication system.

International standard setting

International standard setting refers to the joint establishment of general technical rules and standards for new technology and products in order to facilitate the development of new markets[55] and to lower the chances of inadvertently erecting technical barriers to trade. Common standards are important at the firm level since they allow development of products for world markets and accordingly create greater opportunities to exploit economies of scale. Many foreign aid programs focus on standards, recognizing that if they can influence the choice of standards in the developing world, "trade will follow" and with it the more rapid advancement of technological capability through the importation of embedded technology.

The forms of technical cooperation reviewed above are by no means exhaustive. New forms of technical cooperation will continue to emerge as the result of the increasing

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[55] A good example was the cooperation amongst developers of the compact disc to agree on a common format that would facilitate consumer acceptance. This was prompted by the earlier negative experience with the development of competing formats for video tape players. Notably, the cooperation was industry-driven.

economic globalization and rapid diffusion of information technologies. The critical questions are: how to make such cooperation more effective and efficient? What are the roles of a regional economic organization such as APEC in facilitating such cooperation? To address these questions, we now turn to the next section.

2.5 Economic and Technical Cooperation for Innovation within APEC[56]

The preceding discussion has surveyed several generic ways in which technical cooperation bearing on innovation has evolved. Before considering the extent to which APEC might be able to apply these to strengthening innovative capability in the Asia Pacific region, it might be worthwhile to review briefly how APEC's overall economic and technical cooperation program has evolved.

Economic and technical cooperation in APEC: a brief review

In the early years of APEC, the major focus was on promotion of trade and investment. While other issues of cooperation among member economies were also discussed, such as economic research, technology transfer, human resources development and infrastructure industries, few concrete actions were taken.

The Seattle Summit in 1993 started a new phase of economic and technical cooperation in APEC. At the Summit, it was proposed that the Asia Pacific community be launched. This community spirit later became the founding principle of APEC's program of economic and technical cooperation or ECOTECH as it has come to be called. In the Bogor Declaration adopted at the informal meeting of APEC economic Leaders the following year, ECOTECH was formally listed as one of the three pillars of APEC activities, alongside trade and investment liberalization and trade and investment facilitation (the latter two "pillars" are now usually referred to under the one rubric of trade and investment liberalization and facilitation or TILF).

The importance of ECOTECH was reiterated in the Osaka Action Agenda adopted at the Osaka informal meeting of APEC leaders in 1995, which defined three basic elements in ECOTECH: common policy concepts, joint activities and policy dialogue. Activities encouraged included research, data and information sharing, surveys, training programs, seminars, technical demonstrations, exchange of experts, and establishment

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[56] There is also a range of economic and technical cooperation activity in the Asia Pacific region outside of the APEC framework. Principal parties involved in technical cooperation outside the APEC framework include: (1) multilateral economic organizations such as the United Nations Development Program and its specialized body the United Nation Industrial Development Organization (UNIDO), and the Development Assistance Council under the OECD; international or regional financial institutions such as the World Bank, the International Monetary Fund, the Asian Development Bank and the Inter-American Development Bank; (2) bilateral development assistance programs; such as that provided by the U.S. Agency for International Development (USAID), Japan International Cooperation Agency (JICA), the Canada International Development Agency (CIDA) and other active bilateral donors; (3) international, multilateral or bilateral non-governmental organizations (NGOs), for example, private funds, research institutions and non-governmental development institutions; (4) the private sector through foreign direct investment made by multinational companies.

of research and business networks. Thirteen areas for cooperation were listed, covering human resources development, trade and investment data, trade promotion, industrial science and technology, energy, marine resource conservation, fisheries, telecommunications and information, transportation, tourism, small and medium enterprises, economic infrastructure and agricultural technology.

The Osaka Action Agenda adopted the concept of economic and technical cooperation to distinguish ECOTECH from the traditional concept of development cooperation, which is characterized by a donor-recipient relationship between governments.[57] In the new mode of ECOTECH, business sectors are encouraged to take part in the cooperative activities while the market mechanism is allowed to play its role.

Recognizing that ECOTECH and TILF are mutually complementing each other in driving the economic development of the APEC region, the Ministerial Meeting in Manila in November 1996 adopted the *Declaration on an Asia-Pacific Economic Cooperation Framework for Strengthening Economic Cooperation and Development*. The guiding principles of the Manila Declaration are: mutual respect and equality; mutual benefit and assistance; constructive and genuine partnership; and consensus building. The Declaration enumerated the following as ECOTECH's goals:

- To attain sustainable growth and equitable development in the Asia-Pacific region;
- To reduce economic disparities among APEC member economies;
- To improve the economic and social well-being of the people; and,
- To deepen the spirit of community in the Asia Pacific.

The Declaration listed six priority areas for cooperative activity: developing human capital; fostering safe and efficient capital markets; strengthening economic infrastructure; harnessing technologies for the future; promoting environmentally sustainable development; and developing and encouraging the growth of small and medium enterprises.

In their 1997 Vancouver Declaration, the APEC Leaders noted the progress that had been made in implementing the Manila Declaration. They directed APEC Ministers to give all elements of the Framework equal weight and attention, and to be mindful of its indivisibility as an integrated set of objectives requiring coordination and communications across the APEC agenda. 1997 also saw the decision to establish the SOM Sub-Committee on ECOTECH (ESC). The main objective of the ESC is to advance a more effective implementation of APEC's ECOTECH agenda by consulting with, and integrating the efforts of, various APEC fora through a results-oriented approach which benefits all member economies, providing a policy management tool

[57] It should be noted that ECOTECH is a complement, rather than substitute, to ODA (Manzano and Villacorta, 1996). Indeed, there is no way for ECOTECH to replace ODA, neither in the scale of capital nor in the mode of operation. The most important contribution of ECOTECH is not direct financing specific development projects, but the establishment of various connections and channels for cooperation within APEC community.

for strengthening and streamlining APEC’s work, and providing guidance on possible actions which could be undertaken to achieve APEC’s ECOTECH goals.

Economic and Technical Cooperation in Support of Innovation in the APEC region

Under the Manila Framework Declaration, the priority theme "harnessing technologies for the future" encompasses the largest number of APEC activities in the area of science and technology cooperation. At present, there are 54 activities identified under this theme, covering technology areas such as biotechnology, environmental and cleaner production technologies, communication and information technology/ electronics. Many of the projects are being undertaken by the Industrial Science and Technology Working Group and the Telecommunications Working Group.

These cooperative activities have played an important role in enhancing the innovative capabilities of member economies through:

- Upgrading the technical capability of human resources in member economies, for example through the activities of the Human Resources Development Network for Industrial Technology, which focuses on technical skills training with a special interest in lifelong learning issues.
- Generating an environment conducive for technology transfer, for example the Committee on Trade and Investment and its sub-fora have been pursuing activities which would contribute to enhanced flow of technology. These activities included development of and alignment to international standards, harmonization of trade data elements, survey and dissemination of current status of intellectual property rights (IPR) laws and regulations, and maintaining the IPR Information Mall.
- Facilitating the construction and sharing of technical databases and information, for example through the Industrial Science and Technology Working Group’s projects to maintain and improve the APEC science and technology website (ASTWeb) and to organize the 2nd APEC Technomart (which was held in Chinese Taipei, January 1998) to promote access to regional science and technology information and encourage dialogue.
- Solving specific technical problems in various technical fields, such as telecommunications, energy and agricultural technology.

The 1997 APEC Leaders meeting in Vancouver emphasized that science and technology played a key role in economic growth and were closely linked with trade and investment development. The Leaders instructed Ministers to formulate an APEC Agenda for Science and Technology Industry Cooperation into the 21st Century. The Agenda can be summarized as follows:

Purpose: To facilitate and strengthen the economic and technological cooperation to achieve the APEC vision by encouraging the flow of technology.

Vision: A dynamic and prosperous Asia Pacific region built on the development and application of industrial science and technology which supports economic growth and improve quality of life while safeguarding the environment and the natural resources necessary for economic sustainability.

Principles: Open access, balanced benefits, private sector/business participation, and supportive regulatory framework.

Mechanisms: Improved availability and access to information, improved human resource development, improved business climate, enhanced policy dialogue and review, and facilitation of networks and partnerships

Technology areas: These include biotechnology, environmental and cleaner production technologies, communication, information technologies/electronics, advanced materials, mechatronics, transportation, resource management technology, energy, sustainable agriculture and emergency preparedness and climate prediction.

Implementation: Relevant APEC fora and member economies will implement actions to strengthen science and technology industry cooperation in line with the vision and principles set out.

Promoting More Effective Economic and Technical Cooperation

In view of the above, it is of interest to consider how economic and technical cooperation within the APEC community might be more effectively used to promote technological modernization and innovative activity in the region, and particularly in the developing economies in the region.

Although the issue of technological development falls mainly under the rubric of economic and technical cooperation, the linkage with trade and investment liberalization remains important, a point that has been repeatedly emphasized within APEC. Obstacles to trade and investment are barriers to the flow of goods and the technology that they embody, and to the movement of people and the know-how that they possess. At the same time, impediments to technical cooperation are barriers to the flow of technology and to the trade and investment opportunities that the enhanced innovative activities may bring. As captured in the commonly cited APEC metaphor, trade and investment liberalization and economic and technical cooperation are indeed two wheels of the same cart and both help to achieve the common goal of APEC – mutually beneficial economic growth and development.

Against that general preamble, the following considers how APEC might enhance its economic and technical cooperation in support of technical progress and innovative activity in the region. This discussion is organized in terms of the six priority themes for economic and technical cooperation that APEC has adopted which, as noted earlier, are:[58]

- human resources development;
- promoting safe and efficient capital markets;
- promoting the development of economic infrastructure;

[58] APEC Ministers, Joint Ministerial Declaration, Manila, November 1996.

- harnessing the technologies of the future;
- safeguarding the quality of life through environmentally sound growth; and
- promoting the development of small business.

Cooperation in all these areas would be needed for a truly comprehensive approach to improving innovative capabilities and narrowing the knowledge gap in the APEC region. Since most of the specific cooperation activities are done by business enterprises, it would be up to APEC and governments of member economies to identify those responsibilities that are difficult for the business community to shoulder, those that have spillover effects, demonstrate clear public good characteristics, or that address distributional concerns[59].

First, human resource development, including formal and informal education and on-the-job training, increases the quality and quantity of labour available to an economy; this is particularly important in the emerging knowledge-based economies today. Relevant economic and technical cooperation here includes activities that promote:

- staff training aimed at improving skills in management of technology;
- development of labour market information exchanges and mediation services to improve the efficiency of allocation of skilled human resources, especially in the developing APEC member economies;
- establishment of regional networks for human resource development, such as the APEC Education Hubs launched by Singapore; and
- special attention to raising access to technology of the poorest social groups.

Second, the role of capital markets in allocating savings is particularly important to the emergence of new knowledge-based industries. Relevant economic and technical cooperation here includes activities that promote:

- the deepening and broadening of financial and capital markets, which expands the pool of savings available for investment;
- the development of venture capital markets to facilitate the growth of small and medium sized high-tech enterprises;
- the development of the expertise required to allocate venture capital funds effectively; and
- effective risk management to ensure stability of financial markets.

Third, well-developed economic infrastructure is an important contributing factor to the development of technologically advanced economies and of the information society more generally.[60] However, developing economies face difficulties in financing urgently needed infrastructure projects, particularly since the economic and financial

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[59] See World Bank, World Development Report: Knowledge for Development, Oxford University Press, September, 1998, chapter 10, for a detailed discussion on the roles of governments in narrowing knowledge gaps.

[60] See for example APEC Economic Committee, Towards an Information Society: Developments in APEC, (Singapore, 1998).

crisis. Relevant economic and technical cooperation here includes activities that promote:

- international cooperation to find ways to attract the abundant funds seeking long-term investment opportunities to finance infrastructure investment in developing economies under acceptable risk/return conditions;
- the establishment of an APEC-wide information infrastructure that will facilitate the flow of knowledge and technology and remove barriers of time and space among member economies;
- infrastructure for sustainable cities; and
- infrastructure for rural integration and diversification (including the development of the telecommunications access in rural areas that would support distance learning and extension of information and technology access to the extensive rural communities in APEC member economies, especially the developing economies).

Fourth, clearly the full range of cooperation already underway within APEC under the general rubric of harnessing technologies of the future is of direct relevance here. However, identifying ways to make these programs more effective would obviously be a key priority. For example, consideration could be given to:

- development of facilities such as joint government R&D programs to intensify direct R&D cooperation;
- development of services and networks that facilitate the diffusion of new technologies in the region;
- removal of barriers to international technology transfer that are not consistent with APEC's general spirit of encouraging closer technical cooperation among its members; and
- international standard setting to facilitate cooperative work in the region.

Fifth, as mentioned above, APEC member economies face ever-increasing inter-dependence in the environmental area. Not only is "quality of life" the objective of economic development, a healthy environment is an important "conditioning" factor for the evolution of a knowledge-based society.[61] Relevant economic and technical cooperation here includes activities that promote:

- development of sustainable cities;
- technology transfer in clear technologies; and
- the development of cooperation mechanisms for emergency preparedness.

Sixth, small or medium-sized enterprises (SMEs) are not only one of the most important vehicles for economic development and job creation generally, they are of particular importance in the evolution of the knowledge-based economy. Access to

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[61] See APEC Economic Committee, Towards an Information Society: Developments in APEC, *op cit.* This study notes that several "conditioning factors", one of which is economic infrastructure, are key to the development of knowledge-based economies and the information society more generally.

technology is one of the consistently cited problems of SMEs. Relevant economic and technical cooperation here includes activities that promote:

- SME formation, especially in the knowledge-based sectors; and
- SMEs' access to technical training and modern technology.

The above list is obviously illustrative rather than exhaustive. What it demonstrates, however, is that the enhanced technological development of APEC member economies depends not only on economic and technical cooperation in the narrowly defined area of science and technology, but on many areas right across the board, including continued movement towards open markets through trade and investment liberalization and facilitation.

Finally, although the APEC region has made significant strides in economic and technical cooperation since its establishment, there are many issues yet to be addressed before technical cooperation can play a more important role in the APEC region's sustainable economic development. These issues include:

- Goal-oriented and explicit performance criteria are needed since the current standards to judge the success or failure of economic and technical cooperation are somewhat ambiguous and abstract.[62]
- Most APEC economic and technical co-operation activities are of a consultative nature such as information collection, research and discussion. These activities have improved the general environment of economic and technical cooperation greatly. However, these activities, alone cannot bring about direct economic effects.
- Most APEC cooperative projects are selected and funded by APEC members with some limited funds coming from the APEC Central Fund. Implementation of economic and technical cooperation projects is restricted by the limited capital provided by APEC member governments and the small amount of funding available from APEC itself.
- Successful implementation models are needed. Most ongoing technical cooperation projects are of small scale and their impact is somewhat limited.

More importantly, technical cooperation should be viewed as mutually beneficial activities. The impact of the East Asian financial crisis on the economies of other regions has clearly shown that in a globalized economy, the economic interests of firms and economies are increasingly interdependent on one another. Moreover, there are many issues, such as global climate change, environmental pollution, and many others that require joint efforts among all concerned members of the APEC community and other regions. The increased innovative capabilities of less developed economies will improve the overall capability of APEC in meeting the natural and social challenges facing us in the 21st Century.

[62] Yamazawa, 1997.

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INDIVIDUAL ECONOMY REPORTS

AUSTRALIA

Australia experienced a pick-up in economic growth in the latter half of 1997, accompanied by the best inflation outcomes for several decades and a significant reduction in the Commonwealth budget deficit.

GDP

Real GDP growth slowed to 3.0 percent in 1997 from 3.7 percent in 1996, though the pace of growth picked up strongly towards the end of the year.

Business investment rose strongly in 1997. High levels of investment are expected to continue in 1998 supported by above-average capacity levels and low nominal interest rates. However, growth in business investment will be constrained by the effects of the Asian crisis on corporate profitability, capacity utilization and business confidence.

The housing sector strengthened in 1997 as low interest rates, stable prices and rising incomes contributed to housing affordability reaching record levels. Dwelling investment is expected to grow at a rapid pace in 1998 before easing in 1999 as the increased supply of housing stock satisfies the demand for housing.

Private consumption growth picked up in 1997 after slowing in 1996. A smaller rise in real household disposable income than in private consumption resulted in the savings ratio falling slightly in 1997.

Abstracting from the effects of asset sales, **public investment** rose in 1997. It is expected to decline in 1998 as investment by Commonwealth public trading enterprises declines and State infrastructure programs, particularly those associated with the Olympics, run their course. Moderate **public final consumption** expenditure is expected in 1998 consistent with State and Commonwealth government fiscal consolidation programs.

INFLATION

Australia recorded an exceptionally good **inflation** performance in 1997. The underlying rate of inflation was 1.4 percent through-the-year to the December quarter 1997 (the lowest recorded since this series started in March 1972). In the first half of 1998, underlying inflation was 1.5 percent, slightly below the Reserve Bank's medium-term monetary policy target range of 2 to 3 percent.

Headline inflation was significantly lower than underlying inflation in 1997 reflecting the effect of the decline in mortgage interest rates. In the year to the December quarter 1997, the change in the headline Consumer Price Index was minus 0.2 percent.

EMPLOYMENT

The **unemployment rate** was largely unchanged for much of 1997 before falling towards the end of the year as employment growth picked up in the latter part of 1997 in a lagged response to higher economic growth in 1997. Employment grew by 1.4 percent over 1997 and unemployment was 8.2 percent at the end of the year. Firm employment growth is expected in 1998 as the economy continues to grow.

CURRENT ACCOUNT

The current account deficit fell to 3.2 percent of GDP in 1997 from 4.0 percent in 1996. This reflects an improvement in the balance of trade accompanied by a small decrease in the net income deficit. About three-quarters of the improvement in the current account was attributable to the sale of gold by the Reserve Bank in 1997. The current account deficit is expected to widen in 1998, because of the combined effect of strong domestic demand growth and weaker international growth, before narrowing in 1999 as growth in domestic demand slows and export growth recovers somewhat.

EXCHANGE RATE

The Australian dollar depreciated in nominal terms during 1997 by 18 percent against the US dollar and by 8 percent against the Yen. On a trade-weighted basis the Australian dollar depreciated by 2 percent in 1997, with strong appreciation against the currencies of the troubled Asian economies offsetting falls against the major currencies. The Australian dollar depreciated further against the US dollar in 1998 as the impact of the Asian crisis on world financial markets has continued to unfold.

FOREIGN INVESTMENT

Net foreign debt was 42.0 percent of GDP (or US$145.0 billion) at the end of December 1997, down from a peak of 43.6 percent at the end of December 1992. The public sector accounts for about 25 percent of this total, while approximately 75 percent of Australia's net foreign debt is owed by private sector borrowers. The build-up in foreign debt is a result of ongoing current account deficits reflecting a structural saving investment imbalance. Fiscal policy is focused on reducing the public sector's call on national saving while other policies have been implemented to improve the efficiency and effectiveness of investment.

Foreign direct investment in Australia was US$101.2 billion as of the end of December 1997.

FISCAL POLICY

Total general government net lending returned to surplus in 1997. This improvement was mainly due to the reduction in the Commonwealth Government's underlying budget deficit. Further improvement is expected in 1998, with the Commonwealth

Government expected to record an underlying budget surplus in fiscal 1998-99 of 0.5 percent of GDP.

MONETARY POLICY

The **Reserve Bank Board** has responsibility for the conduct of monetary policy. The objectives of monetary policy are to maintain currency stability and contribute to full employment. The former objective is given operational status by maintaining the underlying rate of inflation at between 2 and 3 percent, on average, over the course of the economic cycle.

To achieve this objective, the Reserve Bank Board targets the overnight cash rate at a publicly announced rate. Intermediate financial aggregates are not specifically targeted by the Reserve Bank Board. Following five reductions of one-half percentage points between mid-1996 and July 1997, the Reserve Bank Board has been targeting a cash rate of 5 percent.

MEDIUM-TERM OUTLOOK

The outlook for the Australian economy is for continued solid economic growth and low inflation.. **Growth** will slow somewhat as a consequence of the economic and financial difficulties being experienced by some of Australia's trading partners, but growth rates in Australia are expected to compare favourably with other developed economies. Growth will be supported by continuing strong growth in private sector demand, driven by low interest rates and solid employment growth. As growth recovers in Asia net exports will recover and the terms of trade improve.

Underlying inflation is expected to increase in 1998 and 1999, but to remain within the Reserve Bank's target range. **The headline CPI** is also expected to increase in 1998 and 1999.

Australia: Summary of Policy Position to Address the Regional Economic and Financial Crisis

Australia's policy to address the regional economic and financial crisis is as follows:

- Australia's medium term fiscal strategy of maintaining the underlying budget in balance, on average, over the course of the economic cycle aims, among other things, to reduce Australia's vulnerability to external shocks and allow greater flexibility for fiscal settings to adjust to changing economic conditions. In addition, the Charter of Budget Honesty aims to improve fiscal outcomes by enhancing the transparency of, and accountability for, fiscal policy, in part by providing for full economic and fiscal outlook reports at the time of the budget, at mid year and prior to elections.
- The Reserve Bank Board has responsibility for the conduct of monetary policy. The Reserve Bank Board seeks to maintain the underlying rate of inflation at between 2 and 3 percent, on average, over the course of the economic cycle. Official interest rates were lowered to 5.0 percent in a series of steps between mid-1996 and July 1997.
- Under the floating exchange rate regime, the Australian dollar has depreciated against the US dollar since the onset of the crisis. The depreciation has been broadly in line with the fall in world commodity prices and has served to mitigate the effect of the crisis on Australian national income.
- Wide-ranging microeconomic reforms have increased the flexibility of the economy as well as its long-run growth potential. In recent years reforms have: improved financial market regulation; increased labor market flexibility; enhanced the operation of corporations law; and included, under national competition policy, reviews of federal and state legislation that restrict competition and which may be costly to business.

Australia: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year)						
Nominal GDP (billion US$)	292.8	285.3	327.1	353.6	395.4	393.8
Real GDP	2.6	4.0	5.1	3.8	3.7	3.0
Total Consumption	3.1	2.0	4.7	4.4	3.1	3.2
• Private Consumption	3.6	2.6	4.6	4.9	3.1	3.4
• Government Consumption	1.7	-0.1	5.2	2.4	3.1	2.3
Total Investment	2.3	3.7	11.6	3.9	6.2	11.1
• Private Investment	n/a	n/a	n/a	n/a	n/a	n/a
• Government Investment	n/a	n/a	n/a	n/a	n/a	n/a
Exports of Goods and Services	5.2	7.5	9.0	4.8	11.2	11.4
Imports of Goods and Services	7.7	5.1	15.3	9.9	9.8	13.8
Fiscal and External Balances (% of GDP)						
Budget Balance (1)	-4.0	-3.7	-3.9	-2.1	-0.9	0.3
Merchandise Trade Balance (f.o.b.)	0.6	0.0	-1.0	-1.2	-0.2	0.4
Current Account Balance	-3.8	-3.5	-5.3	-5.6	-4.0	-3.2
Capital Account Balance	4.2	3.2	4.8	5.7	3.9	-3.2
Economic Indicators (% change from previous year, except as noted)						
GDP deflator	1.4	1.3	1.1	2.5	2.1	2.0
CPI	1.0	1.8	1.9	4.6	2.6	0.3
M3	5.4	7.5	8.2	8.3	9.4	9.3
Short-term Interest Rate (2) (%)	6.5	5.1	5.7	7.7	7.2	5.4
Exchange Rate (A$/US$)	1.37	1.47	1.36	1.35	1.27	1.36
Unemployment Rate (%)	10.8	10.9	9.7	8.5	8.6	8.6
Population (millions)	17.5	17.7	17.9	18.1	18.3	18.6

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Budget Balance refers to Total General Government net lending on a National Accounts basis. (2) The short-term interest rate is the 90-day bank-accepted bills futures contract.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	3.5	3.5	2.8	n/a	3.2	n/a	2.0	2.3	n/a	3.2
Real exports	n/a	n/a	-6.3	n/a	-0.8	n/a	n/a	4.3	n/a	5.5
Real imports	n/a	n/a	0.3	n/a	9.8	n/a	n/a	3.6	n/a	7.5
CPI	2.5	1.9	n/a	n/a	1.8	n/a	2.8	n/a	n/a	2.6

Notes: The IMF forecast is from the World Economic Outlook (IMF, September 1998); figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, September 1,1998); figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

BRUNEI DARUSSALAM

GDP

Real GDP growth increased to 4.0 percent in 1997 up from 3.5 percent in 1996. The largest contribution to growth came from the non-oil sector, comprising the Government and the non-oil private sector, which has been performing favorably and grew almost 7 percent in 1997. The strong growth in this sector has helped to offset the declining growth of the oil sector. The increase also raised the non-oil sector share of nominal GDP to 64.4 percent in 1997 from 46 per cent in 1990.

The rapid growth in the **services sector** in 1997 came mainly from restaurant and hotel services (12.8 percent), business services (10.2 percent), transport and communication (9.0 percent), construction (8.5 percent), banking and finance (8.2 percent), wholesale trade (8.1 percent) and insurance (7.7 percent).

Manufacturing sector growth increased to about 4.6 percent in 1997, up from 4.0 percent in 1996.

The primary sector, namely agriculture, forestry and fishery, witnessed an increase in growth to 6 percent in 1997 compared to 5 percent in 1996. Both manufacturing and the primary sector are still comparatively small in terms of their contribution to GDP. Accelerating the development of these sectors is part of the national objective to diversify the economy in the face of the continuous decline in the contribution of the oil and gas sector.

Brunei Darussalam's **Seventh National Development Plan** (1996-2000) called for more balanced social-economic development. A sum of B$ 7.2 billion has been allocated to finance the implementation of several development programs and projects. Some of the projects and programs also aim to facilitate the development of the private sector.

Fiscal consolidation measures adopted in 1998 apparently have slowed economic activity, particularly in the construction and related sectors. Consequently, GDP growth is expected to fall to around 1.8 percent in 1998.

EXTERNAL TRADE

The major **exports** of Brunei Darussalam are crude oil and natural gas, which account for 90 percent of all exports. Ready-made garments and re-export items account for the rest. Exports increased by almost 18 percent in 1997 compared to only 3 percent growth in the previous year. As regards **imports**, Brunei Darussalam is a net importer of almost all items. In 1997, machinery and transport equipment made up 39 percent of total imports while manufactured goods accounted for 36 percent, food (11 percent) and other commodities (14 percent). Nonetheless, imports dropped in 1997 by 10 percent compared to the increase of 15 percent in the previous year. As a result, the

balance of trade improved from a deficit in 1996 to a surplus of US$ 559 million in 1997.

In 1998, the terms of trade is expected to be more favourable. With the decline in oil prices, exports are expected to increase by 7.8 percent, while import growth is expected to remain negative at 6 percent.

INFLATION

Inflation, as measured by the rate of increase in the Consumer Price Index (CPI), fell to 1.7 percent in 1997 from 2.0 percent in 1996.

As Brunei Darussalam is a net importer of almost all items, the exceptionally high inflation rate in 1995 was partly due to significant increases in import duties on cigarettes imposed in December 1994 and on motor vehicles in February 1995. Conversely, the substantial reduction of import duties on almost 700 consumer items in April 1995 contributed significantly to lowering the inflation rate to 2 percent in 1996 and 1.7 per cent in 1997.

Price controls on some basic necessities have also helped to contain price increases. Prices of sugar and rice are set by the authorities. Indicative price ceilings on items such as basic foods, household goods, automobiles and tobacco goods have also been set by the authority concerned. Other factors include the annual Brunei Grand Sales held during the festive seasons, which also helps in reducing the CPI growth, as well as gas and utilities subsidies.

With the economic and financial crisis deepening in the region, domestic prices are expected to be affected by the appreciation and depreciation of Brunei's main trading partners' currencies. Reflecting these various trends, the CPI is expected to increase by 2.0 percent in 1998. However, prudent monetary and fiscal policies will be maintained to prevent build up of inflationary pressures, as will enforcing regulations governing prices of essential goods and services.

EMPLOYMENT

Total **population** was estimated to be around 314,000 people in 1997, up 3.1 percent from 1996. Of the total population, 52 percent were male and 48 percent female. In 1998, total population is estimated to be around 323 thousand. **The labour force** grew by 4.6 percent in 1997, well above the growth rate of the population. Total **employment** stood at 124,000, or 39 percent of the total population. In 1998, Employment is expected to grow by 1.6 percent to reach 126 thousand.

Migrant workers constitute almost half of the working population, the majority coming from the neighboring ASEAN economies to meet a shortage of local workers, particularly in the construction and related industries. Migrant workers accounted for 65 percent of the unskilled laborers, 38 percent of professionals and 22 percent of the administrative and managerial work force.

Women's labour force participation rate has also been on the increase, which is another factor contributing to more rapid labour force growth as compared with population increase. The participation rate of women rose from 31 percent in 1981 to 48 percent in 1991. The total number of women classified as employees and employers increased from 14,200 employees and 70 employers in 1981 to 33,100 employees and 160 employers in 1991. The growing presence of women in the job market is particularly felt in the services sector including community, social and personal services; wholesale and retail; hotels and restaurants; financial and insurance services, real estate and business services.

EXCHANGE RATE

The Brunei dollar, which is pegged at par to the Singapore dollar, is relatively stable despite the regional financial crisis that began in mid-1997. Since there is no government regulation or prescription of exchange rates or exchange rate margins, the commercial banks are free to set the exchange rates for currencies other than the Singapore dollar in their dealings with the general public.

FISCAL POLICY

Government spending will be moderate during the current Plan period due to public sector reforms. As part of an effort to reduce dependence on the government budget, as well as to enhance efficiency and productivity, some government agencies/activities have been identified as feasible to be privatized. Steps will continue to be taken to increase government revenue from various sources such as from the non-oil activities. In view of the small market size and labour shortage problem, industrialization through proxy will also be pursued.

MONETARY POLICY

Brunei Darussalam has no central bank or monetary authority. The Ministry of Finance, through a number of agencies and departments under it perform the various functions of a central bank/monetary authority. The Brunei Currency Board is responsible for the issuance and management of the country's currency. The Financial Institution Division of the Ministry of Finance is responsible for licensing and regulating financial institutions. The Minimum Cash Balance requirement is one of the latest measures introduced in carrying out this function. There are no credit or interest rate restrictions imposed, and the Brunei Association of Banks determines daily interest rates.

MEDIUM-TERM OUTLOOK

Brunei Darussalam is a small, open and oil-based economy. With the declining contribution of the oil sector to the economy, economic diversification and human resources development have been in the economy's national development agenda. Real GDP growth is expected to pick up to about 2.3 percent in 1999, 2.5 percent and 3.0 percent in 2000 and 2001 respectively.

The terms of trade are expected to be favourable during this period. The price of crude oil expected to remain on the low side, while non-oil exports increase. Exports are expected to increase by 6.5 percent in 1999, 7.3 percent and 8.0 percent in 2000 and 2001 respectively.

Brunei will play host to the Southeast Asia Games in 1999 and to APEC in the year 2000; the year 2001 meanwhile has been designated as Brunei Visit Year. Imports are thus expected to increase by 2.5 percent, 3.5 percent and 4.0 percent during the next 3 years respectively.

Brunei Darussalam : Measures to Address the Regional Financial Crisis

- The formation of an Economic Council with membership from public and private sector to expedite private sector development.
- Maintaining moderate monetary policy.
- Maintaining a prudent fiscal policy to encourage efficient and productive public sector investment.
- Promoting privatization policy to enhance management's efficiency and productivity and to reduce size of public sector.
- Maintaining price stability by keeping the inflation rate at 2 per cent per annum.
- Improving investment environment to encourage FDI.
- Encouraging local traders to boost domestic demand and to sustain BOP surplus.

Brunei Darussalam: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	4.0	4.1	4.4	5.0	5.3	4.8
Real GDP	-1.1	0.5	1.8	2.0	3.5	4.0
Total Consumption	n/a	n/a	n/a	n/a	n/a	n/a
• Private Consumption	n/a	n/a	n/a	n/a	n/a	n/a
• Government Consumption	n/a	n/a	n/a	n/a	n/a	n/a
Total Investment						
• Private Investment	n/a	n/a	n/a	n/a	n/a	n/a
• Government Investment	24.6	49.7	6.5	17.6	-27.5	42.2
Exports	-9.5	-4.6	-8.2	0.2	2.8	17.5
Imports	-0.3	5.0	24.0	22.0	15.0	-10.0
Fiscal and External Balances (% of GDP)						
Budget Balance	-5.0	0.3	14.0	10.2	2.8	2.4
Merchandise Trade Balance (f.o.b.)	24.7	11.1	10.1	7.9	4.4	12.2
Current Account Balance	60.0	47.8	63.7	47.4	52.1	48.9
Capital Account Balance	n/a	n/a	n/a	n/a	n/a	n/a
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	0.3	-0.2	-0.3	7.1	0.4	0.7
CPI	1.3	4.3	2.4	6.0	2.0	1.7
M2	4.6	10.8	39.5	6.7	-4.0	-1.1
Short-term Interest rate (%)	6.0	5.8	6.0	6.5	6.5	7.0
Exchange Rate (B$/US$)	1.63	1.60	1.53	1.42	1.41	1.68
Unemployment Rate (%)	4.5	4.1	3.6	4.9	5.0	5.0
Population (millions)	0.27	0.28	0.28	0.30	0.31	0.31

Source: Data are as submitted by member economies, unless otherwise specified.

Forecasting Summary (% change from previous year)

	1998	1999	2000	2001
		Official		
Real GDP	1.8	2.3	2.5	3.0
Real exports	7.8	6.5	7.3	8.2
Real imports	-6.0	2.5	3.5	4.0
CPI	2.0	2.2	2.5	3.0

CANADA

Economic growth in Canada strengthened in 1997, owing in large measure to the sustained decline in interest rates and improved confidence made possible by the government's success in deficit reduction and in keeping inflation low. However, over the course of 1998, growth has slowed, reflecting in some part special factors, such as the GM strike in mid-year, and more generally and importantly the overall slowdown internationally, which has clouded economic prospects both in Canada and globally for the second half of the year. Nonetheless, unemployment is at its lowest level in 8 years, the financial balance continues to run a surplus and domestic demand has remained firm. The consensus forecast for growth in 1998 and 1999 has been reduced from earlier projections in view of the more difficult international climate but remains very healthy. Unemployment should remain stable over this period.

GDP

Real GDP rose by a robust 3.7 per cent in 1997, up from only 1.2 per cent in 1996. The pace of growth moderated in the first half of 1998 to 3.4 percent over the first half of 1997. On a quarter-over-quarter basis, growth decelerated to a 3.4 percent annualized rate in the first quarter of 1998 and further to a 1.8 percent annualized rate in the second quarter of 1998. The second quarter slowdown reflected a sharp slowing in inventory accumulation[1] as well as strikes in the construction industry and the auto sector and slower expansion of exports. On a monthly basis, real GDP declined for four consecutive months from April through July. However, a strong surge in manufacturing shipments and exports in August, led by a rebound in auto sales following the resumption of work at GM, points to a rebound in real GDP. The consensus forecast for Canada now calls for growth in 1998 on an annual average basis to be 2.9 percent.

Consumer demand, after growing by 4.1 percent in 1997, has continued to be generally robust in 1998 with quarterly growth surging to an annualized 5.5 percent in the second quarter following a growth pause in the first quarter. The second quarter surge was, in part, financed by lower savings which in turn reflected strong consumer confidence supported by declines in the unemployment rate. At mid-year, however, there were signs in the retail sales figures of momentum in consumer spending ebbing along with consumer confidence.

Business investment rose by 14.5 percent in 1997, as business confidence soared to its highest point in decades and capacity utilization increased markedly. Investment remained at a high level in the first half of 1998, despite a fallback in profits from their recent peak at the end of 1997 and some erosion of business confidence. The latter factors may result in business investment being scaled back in the near-term future.

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[1] Excluding the inventory effect, real GDP grew at an annualized quarterly rate of 3.7 percent in the second quarter of 1998

Residential construction grew at double-digit rates in 1996 and 1997, reflecting the increased affordability of housing with the decline in interest rates. On a quarterly basis, residential construction declined in the first two quarters of 1998 from the high levels at the end of 1997. Third quarter indicators have been positive, pointing to a likely mid-year rebound in this sector. On an annual average basis, growth is likely to be positive in 1998.

International trade grew strongly in 1997 and continued to expand in the first half of 1998 despite the unsettled economic conditions in parts of the globe. In 1997, exports grew by 8 percent in real terms (up from 5.7 percent the preceding year) while imports soared by 13.4 percent, reflecting booming domestic demand last year.

In the first half of 1998, the key international developments affecting Canadian trade performance were: firm economic growth in the U.S. and in the European Union economies; the continuation of low commodity prices as global demand remained weak; and the economic slowdown in Asia. Exports to Asian destinations were down by roughly 1/3 while the value of energy exports in the first half of 1998 was 14.4 percent below the level of the first half of 1997, notwithstanding a 6.8 percent gain in volumes. The ground lost in the commodity sector was, however, offset by the gains in exports of machinery and equipment, which moved past the auto sector to become Canada's leading export sector. This development underscores the fact that Canada's trade is less resource-intensive than often thought. A strong surge in merchandise trade flows and a strengthened trade surplus in August, driven by a rebound in auto trade, points to a dynamic third quarter picture in trade.

INFLATION

Since 1991, the Government and the Bank of Canada have jointly announced a **target range for the inflation rate.** This target range has been gradually lowered since it was first announced and presently stands at 1 to 3 per cent. In February 1998, the commitment to maintain inflation within the 1 to 3 per cent target range was extended until 2001. The government and the Bank plan to determine the long-run target for monetary policy before the end of 2001.

The core inflation rate, which excludes volatile food and energy prices and indirect taxes, has not departed from the target range for a sustained period since it was established. During the course of 1997, the core inflation rate moved from the mid-point of the target range to the lower bound (and at times below). For the year as a whole, it averaged 1.6 percent. In the first half of 1998, the core inflation rate has remained near the lower bound, averaging 1.3 percent on a year-over-year basis. Headline inflation has for the most part tracked core inflation, falling over the course of 1997 and remaining in the vicinity of the lower bound of 1 percent through the first half of 1998. In 1997, headline inflation averaged 1.6 percent and in the first half of 1998, it averaged 1.0 percent.

Another significant development in this respect has been the low level of inflation as measured by the **GDP deflator**. In 1997, growth in the GDP deflator slowed to 0.5

percent on an annual average basis from 1.4 percent in 1996. The steeper decline in the GDP deflator compared to the CPI was due to low export prices, which in turn reflected the impact of low commodity prices and the impact on prices in general from the Asian crisis.

EMPLOYMENT

The growth surge in 1997 translated into 372,000 jobs being created. The pace of job creation continued into 1998, with 264,000 jobs created in the first nine months of the year, pushing the **unemployment rate** down to 8.5 per cent on average in the first half of the year – its lowest level in almost eight years. The labour market remained stable in the third quarter and the unemployment rate edged down to 8.3 percent in August, remaining at that level in September.

CURRENT ACCOUNT

Canada's current account significantly improved over the period 1993 to 1996, moving from a deficit of almost 4 per cent in 1993 to a surplus of 0.6 per cent of GDP in 1996. The improvement was primarily due to a sharp increase in the merchandise trade balance. However, lower interest rates also helped to reduce net outflows of investment earnings. Strong economic growth, particularly in sectors with strong propensities to import, caused the current account to return to a deficit of 1.5 percent of GDP in 1997, including an average of 2¼ percent of GDP in the second half. The current account deficit was reduced to marginally below 2 percent of GDP in the first half of 1998, as stronger real net exports more than offset the further weakening in the terms of trade from the Asian financial crisis and the declining trend in world prices for Canada's commodity exports that began in early 1997.

MONETARY CONDITIONS

A combination of factors led to a steady decline in Canadian interest rates across the yield spectrum over the period to mid-1997. These included the increased financial market confidence resulting from improved public finances and sustained low inflation, as well as the improvement in Canada’s current account. Short-term interest rates have increased since mid-1997, in part to counterbalance the stimulative impact of a lower exchange rate.

More recently, the Bank of Canada raised its key lending rate by 100 basis points on August 27 to support the exchange rate after the Canadian dollar came under intense selling pressure in July and August of 1998, a period when the US dollar appreciated globally in response to inflows of capital from abroad. With the lowering by the U.S. Federal Reserve of its federal funds rate by ¼ of a percentage point on September 29, the Bank of Canada lowered its Bank Rate commensurately. A further ¼ cut in the Bank Rate was made on October 16, following the Federal Reserve’s 25 basis point cut on the preceding day, as the Bank of Canada noted the US developments as well as low and stable inflation in Canada.

Long-term interest rates have continued to decline more or less steadily during 1998 in line with the strong fundamentals in the economy and the overall international trend towards lower long-term rates.

FISCAL POLICY

At the federal level, the budget was balanced in fiscal year 1997-98 for the first time since 1969-70, with a surplus of C$ 3.5 billion recorded. The budget is also expected to be balanced in 1998-99 and 1999-2000, marking the first time in almost 50 years that the federal government's books will be balanced over three consecutive years. With these results, the federal debt-to-GDP ratio fell from 71.1 per cent of GDP in 1996-97 (and a peak of 71.9 in 1995-96) to 67.8 percent in 1997-98. It is expected to fall further to 63 per cent by 1999-2000.

Canada's provincial governments have also made substantial progress toward balancing their budgets. Six of Canada's twelve provinces and territories reported balanced budgets or surpluses in FY97-98 and all are expected to have balanced budgets by the end of the decade. The aggregate federal-provincial budgetary balance has swung from a record deficit of C$ 66 billion in 1992-93 to a small surplus of C$ 0.1 billion in 1997-98.

Canada has a somewhat stricter definition of the **budget balance** than do most other large industrial economies. It is Canada's financial requirements that correspond more closely to the deficit/surplus measures used in these economies. Under this definition, the federal government had a financial surplus of C$ 1.3 billion in 1996-97, rising to C$12.7 billion in 1997-98; sizable surpluses are expected for 1998-99 and 1999-2000.

MEDIUM-TERM OUTLOOK

Canada's near-term economic prospects remain solid, despite the weaker external environment. Growth is currently expected to ease to an expected 2.9 percent in 1998 and 2.3 percent in 1999 (according to the consensus private sector forecast as of October 1998). These projections are down from earlier forecasts of growth of 3.5 per cent in 1998 and 2.9 per cent in 1999. Major international organizations share this general outlook. The IMF forecasts 3.0 percent growth for Canada in 1998 followed by 2.5 percent in 1999, with inflation remaining below 2 percent.

Canada's Approach to Addressing the Regional Economic and Financial Crisis

Canada emphasizes maintaining prudent fiscal and monetary policies and a flexible exchange rate regime to address international turbulence:

- Since 1991, the Government and the Bank of Canada have jointly announced a target range for the inflation rate, which presently stands at 1 to 3 per cent.
- Progress on the fiscal side has resulted in Canada moving into surplus on a combined federal-provincial basis in FY1997-98, including a federal surplus of C$ 3.5 billion, allowing a reduction of the debt-GDP ratio.
- Canada maintains a transparent and attractive system for foreign direct investment.
- The Bank of Canada raised its key lending rate by 100 basis points on August 27 to support the exchange rate after the Canadian dollar came under selling pressure in July and August of 1998, a period when the US dollar appreciated globally in response to inflows of capital from abroad.
- In view of low and stable inflation in Canada, the Bank of Canada has lowered interest rates in line with interest rate cuts by the U.S. Federal Reserve.
- Internationally, Canada has promoted improved global and regional surveillance and improvements to the global framework for dealing with financial market turbulence.

Canada: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	577.9	561.9	558.2	582.3	601.6	617.6
Real GDP	0.9	2.5	3.9	2.2	1.2	3.7
Total Consumption	n/a	n/a	n/a	n/a	n/a	n/a
• Private Consumption	1.8	1.9	3.1	1.7	2.4	4.1
• Government Consumption	1.0	-0.2	-1.8	-0.4	-1.3	-0.1
Total Investment	n/a	n/a	n/a	n/a	n/a	n/a
• Private Investment	-1.4	-3.0	7.1	-3.1	6.3	14.1
• Government Investment	-0.3	-2.1	7.0	-1.2	-3.7	-5.4
Exports of Goods and Services	7.9	12.0	11.8	9.3	5.7	8.0
Imports of Goods and Services	6.2	8.1	9.1	6.7	5.2	13.3
Fiscal and External Balances (% of GDP)						
Budget Balance [1]	-8.0	-7.6	-5.5	-4.3	-2.0	0.9
Merchandise Trade Balance (f.o.b.)	-0.4	-0.01	1.1	3.0	3.8	1.7
Current Account Balance	-3.6	-3.9	-2.5	-0.95	0.6	-1.5
Capital Account Balance	n/a	n/a	n/a	n/a	n/a	n/a
Economic Indicators (% change from previous year, except as noted)						
GDP deflator	1.3	1.2	1.2	2.6	1.4	0.5
CPI	1.5	1.8	0.2	1.9	1.6	1.6
M2	n/a	n/a	n/a	n/a	n/a	n/a
Short-term Interest rate [2] (%)	6.74	4.97	5.66	7.22	4.35	3.61
Exchange Rate (C$/US$)	1.209	1.290	1.366	1.372	1.364	1.385
Unemployment Rate (%)	11.3	11.2	10.4	9.5	9.7	9.2
Population (millions)	28.48	28.86	29.22	29.57	29.92	30.24

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Budget balance is on a National Accounts basis. (2) Short-term interest rate is the 90-day corporate paper rate from the IMF, International Financial Statistics.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	2.9	3.0	3.0	n/a	3.3	2.3	2.5	2.7	n/a	3.0
Real exports	7.0	n/a	0.7	n/a	8.3	5.2	n/a	7.3	n/a	7.5
Real imports	8.9	n/a	8.0	n/a	9.8	4.9	n/a	6.4	n/a	7.7
CPI	1.5	1.3	n/a	n/a	1.3	1.7	1.9	n/a	n/a	1.6

Note: The official forecast refers to the private sector consensus forecast. The IMF forecast is from the World Economic Outlook (IMF, September 1998); figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, September 1, 1998); figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

CHILE[1]

When the financial and economic crisis hit, the Chilean economy was in a phase of sustained economic expansion, with the lowest inflation rate in the last 37 years and the highest investment rate ever registered. In addition, currency reserves were high, the banking system was healthy, and public finances were solid (including a low rate of external debt, a high rate of public savings and sustained fiscal surpluses). The most important effects of the financial crisis on the Chilean economy have been the deepening of the fall in the price of copper, a key export commodity, and the decrease of net capital inflows to the economy.

GDP

In 1997, Chile remained one of the most dynamic economies in the world as its **real GDP** expanded by 7.1 percent, moderately slower than the pace of 7.4 percent in 1996 and 10.6 percent in 1995.[2] The moderation reflected the restrictive adjustment policy that was in force from December 1995 to February 1997. With the 1997 results, real GDP has expanded for fourteen consecutive years, at an average annual rate of 7.6 percent, including 5.9 percent in per capita terms.

The most dynamic **industrial sectors** in 1997 were glass production, which grew by 28.9 percent, transport material construction (19.9 percent), chemical industries (18.9 percent), non-electric machinery (18.3 percent), plastic products (11.3 percent), professional and ophthalmic equipment (10.0 percent), and rubber products (9.8 percent). Textiles, non-ferrous metals and footwear had the worst performance.

Gross Fixed Capital Formation was dynamic in 1997, expanding by 13.2 percent over 1996, supported by growth in capital goods imports of 12.1 percent, and growth in capital goods production of 12.9 percent. As a share of GDP, gross fixed capital investment rose to 32.1 percent in 1997, from 31.2 percent in 1996.[3]

Business Investment continued to be the principle motor of the economy in 1997, rising 12.8 percent, and accounting for a record of 38.0 percent of real GDP. The most dynamic sectors in 1997 were infrastructure and mining. In nominal terms, business investment accounted for 26.9 percent of GDP, which was financed with contributions of 21.4 percent from national saving and 5.5 percent from external sources.

Exports of goods and services rose by 9.9 percent in 1997, while imports increased by 14.8 percent. As noted earlier, the high level of investment activity explains in part the

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[1] Note: Some statistical data differ from those reported in previous APEC Economic Outlooks since, in accordance with the IMF Guidelines, the Central Bank has revised its methodology for Balance of Payment and National Account figures.

[2] Under the former national accounts methodology, the corresponding rates for 1996 and 1995 were 7.2 percent and 8.5 percent respectively.

[3] Under the former national accounts methodology, the corresponding figure for 1996 was 28.1 percent.

increase in capital goods imports of 12.1 percent. Meanwhile, falling import prices resulting in large measure from the Asian crisis helped to boost growth in consumer goods imports to 13.6 percent.

In the first half of 1998, real GDP grew by 6.3 percent over the corresponding year-earlier period. Growth was led by gross fixed capital formation, which expanded by 10.8 percent in the quarter. Exports grew by 8.3 percent, while imports expanded by 16.1 percent.

INFLATION

For the last seven years, growth in the **Consumer Price Index** has declined steadily, in line with Central Bank targets for the 12-month CPI increase. In 1997, inflation by this measure fell to 6.0 percent, the lowest rate in the last 37 years. **Inflation in the non-tradable goods** in 1997 sector declined from 7.8 percent in 1996 to 7.0 percent, while in the tradable goods sector, inflation fell from 4.9 percent to 4.7 percent.

In the first half of 1998, the CPI was up 5.4 percent over the corresponding year-earlier period, slowing to 5.2 percent year-over-year in the third quarter. By September, year-over-year inflation had fallen to 4.8 percent. In terms of the inflation targets, cumulative inflation over the first nine months of 1998 amounted to 3.2 percent, which is on a path to attain the target of 4.5 percent for the year. For 1999, the Central Bank's inflation target has been further lowered to 4.3 percent.

EMPLOYMENT

In 1997, for the third consecutive year, **employment** grew faster than the labour force, reaching a total of 5.3 million jobs (up 1.9 percent or 99,200 jobs from the 1996 level). This reduced the **unemployment** rate to 6.1 percent in 1997 (344,140 persons) from 6.3 percent in 1996. The job growth was in large measure accounted for by a 4 percent rise in employment of women, who took 65 percent of the new jobs created in 1997.

Employment in the non-tradable sector increased by 3.5 percent (the major contributions coming from construction, commerce, transport and telecommunications, personal services, and financial services). By contrast, in the tradable sector, employment decreased by 1.3 percent, including a 37.7 percent decrease in agriculture, hunting and fishing which was partially offset by an increase of 14.8 percent in manufacturing.

The youth unemployment rate remained comparatively high in 1997 reaching 19.5 percent for persons aged 15-19 and 13.4 percent for persons aged 20-24.

The region of Metropolitan Santiago had a higher than average unemployment rate (7.1 percent); this reflected, in large part, frictional unemployment.

Nominal wages grew by 8.7 percent in 1997 while real wages grew by 2.4 percent; in both cases, the rates of growth were below the rates witnessed in 1996 (9.5 percent and

2.7 percent respectively) and below labour productivity growth of 5.1 percent in 1997 (4.4 percent in 1996). The strong growth in labour productivity has allowed for growth in real wages without creating inflationary pressures.

CURRENT ACCOUNT

In 1997, the **balance of payments** registered a surplus of US$ 3.2 billion, up from US$1.2 billion in 1996. This largely reflected high net capital imports during the first ten months of the year.

In 1997, the **current account balance** experienced a deficit of US$ 4.1 billion (5.3 percent of GDP), including a deficit on merchandise trade of US$ 1.3 billion. Improvements in the terms of trade, which boosted export values in the first half of 1997, had resulted in a merchandise trade surplus in the first half of the year. However, the subsequent policy shift in February 1997, with fiscal policy becoming more expansionary to support growth and monetary policy tightening to stabilize the exchange rate, resulted in an increase in imports and the shift of the merchandise trade balance into deficit.

Exports of goods (f.o.b. basis) grew by 9.9 percent in value and 10.8 percent in volume in 1997 with respect to the previous year, to reach US$ 16.9 billion. Copper exports grew by 19.3 percent in volume and 18.7 percent in value. Industrial exports grew by 7.2 percent in volume and 6.7 percent in value, led by chemicals and forestry products.

Imports of goods (c.i.f. basis) grew by 10.3 percent in value and 15.5 percent in volume in 1997, reaching US$ 18.2 billion. The rate of growth on a quarterly basis increased from 4.7 percent year-over-year in the first quarter to 15.7 percent in the fourth. In value, consumer goods and capital goods imports grew by 13.6 percent and 12.1 percent respectively, while imports of production inputs grew by 8.3 percent over the corresponding year-earlier period. In volume, the corresponding growth rates were 17.3, 17.0 and 14.2 percent respectively.

In the first half of 1998, the value of exports amounted to US$ 8.03 billion, down 10.8 percent from the corresponding year-earlier period, while imports totaled US$ 9.13 billion, up 11.2 percent from the first half of 1997. The merchandise trade balance accordingly registered a deficit of US$ 1.1 billion.

The balance of payments for the first quarter of 1998 registered a deficit of US$ 2.16 billion, which was accounted for by the current account deficit of US$ 2.19 billion.

EXCHANGE RATE

After four years of nominal stability and **real exchange rate** appreciation, the peso depreciated against the US dollar since November 1997. Since February 1998, however, the restrictive monetary stance of the Central Bank has stabilized the Chilean peso.

From the beginning of the economic and financial crisis in Asia to the end of the third quarter of 1998, the Chilean peso depreciated by about 11 percent in nominal terms against the US dollar while appreciating significantly against Asian currencies and most Latin American currencies as well. The lower exchange rate against the U.S. dollar is not related to the fundamentals of the economy, which are still very solid.

FOREIGN INVESTMENT

The **capital account** (excluding reserves) registered a high surplus of US$ 7.4 billion (or 9.5 percent of GDP), with both direct and portfolio investment flows registering positive balances. However, while direct investment fell by 2.6 percent from 1996 levels to US$ 3.5 billion, portfolio investment (which consisted in large part of American Depository Receipts) increased by 115.9 percent to reach US$ 2.4 billion. In the first quarter of 1998, the capital account (excluding reserves) showed a surplus of US$ 255 million; net direct investment reached US$ 1,453 million, while portfolio investment registered a negative balance of US$ 457 million.

In the period up to October 1997, the large net inflow of capital reflected three factors: positive margins of domestic over external interest rates, stability of Chile's economy, and the trend appreciation of the peso. However, with the increased perception of risk attaching to emerging markets since the onset of the financial crisis, net capital flows to Chile have turned negative. The nominal devaluation of the Chilean currency against the US dollar during the fourth quarter of 1997 contributed to the swing.

FISCAL POLICY

Fiscal policy contributed to the maintenance of stable macroeconomic conditions in Chile in 1997. **Public spending** expanded by 5.8 percent, well below the rate of growth in aggregate demand and GDP (9.3 percent and 7.1 percent, respectively). The **public savings rate** reached 5.5 percent in 1997, and the central government global balance remained in surplus (1.9 percent of GDP). For 1998, the corresponding targets set in the National Budget are 4.5 percent and 2.0 percent respectively.

The Ministry of Finance has recently set the targets for 1999, pursuant to which public expenditure will expand by 2.8 percent. The public savings rate is expected to reach 3.5 percent of GDP in 1999, and the central government balance is projected to also remain in surplus at 0.2 percent of GDP.

MONETARY POLICY

Monetary policy in 1997 supported the recovery of aggregate domestic demand and real GDP growth, which accelerated over the course of the year to rates to 13.7 percent and 9.6 percent respectively in the fourth quarter of 1997. In order to prevent overheating of the economy (imports grew by 15.7 percent in the last quarter of 1997), and to deal with several developments, including the depreciation of the exchange rate, the unfavorable terms of trade and the corresponding deterioration of the balance of payments, the Central Bank sold foreign currencies and reduced the liquidity of the financial system by increasing the overnight real interest rate to 8.5 percent in January 1998.

MEDIUM-TERM OUTLOOK

The **main external factors** impacting on the Chilean economy in 1998, and particularly on the current account and the exchange rate, are the declines in the price of copper and the evolution of inward foreign investment and credits flows. However, the fiscal and monetary measures adopted by the authorities should reduce these negative effects.

The strength of the Chilean economy will allow for another year of growth in 1998, despite the Asian economic and financial crisis, but the rate of expansion is expected to slow by 2 percentage points from the 1997 pace. National income will increase by less than production due to the deterioration of the terms of trade. The growth rate of imports should slow down due to these factors, among others. Exports will grow in volume, but their value will depend on the prices they can reach in the markets of destination.

The impact of the crisis will be particularly felt in the evolution of Chile's **foreign trade**, which will be influenced by the rates of growth and exchange rate alignments in four key markets abroad: Japan, Argentina, Brazil and Korea (which are, respectively, Chile's second, third, fourth and fifth major trade partners and all of which have had significantly lowered short-term forecasts according to the October 1998 IMF projections). Brazil and Argentina have been particularly important and dynamic markets for Chile's manufactured exports. In addition, US market conditions have been and will continue to be stabilizing factors for Chilean commercial and financial markets.

The **inflation** target for 1998 has been established at 4.5 percent by the Central Bank, while the target for 1999 has been set at 4.3 percent.

The **current account** deficit is an area that warrants special attention. The Central Bank has projected a deficit of 6.0 percent of GDP for 1998, in large part due to the unfavorable developments with respect to the terms of trade, which are projected to decrease by 10.0 percent in 1998.

The size of the **trade deficit** in 1998 will be determined by two variables: the terms of trade and domestic aggregate demand growth. A key factor for the terms of trade is the price of copper, which averaged US$ 0.78/llb in the first half of 1998, down from an average price of US$ 1.03/llb in 1997, and which continued to trend down to the US$ 0.72 range at the beginning of the fourth quarter. The decline in the price of this key Chilean export commodity is the main factor behind an expected widening of the trade deficit to close to US$ 2.3 billion for 1998 as a whole. On the other hand, aggregate domestic demand growth should slow as the result of five factors: (i) the restrictive monetary policy; (ii) the tightened fiscal policy; (iii) the terms of trade deterioration; (iv) the negative wealth effects of the peso depreciation; and (v) the high cost of external financing. The restrictive macroeconomic policies are also expected to reduce non-financial services imports (which amounted to US$ 4.1 billion in 1997) and the outflow of foreign investment profits (US$ 2.4 billion in 1997).

The evolution of the **capital account** is uncertain. Chile can be seen simply as one emerging market among others, or it can be seen as a solid economy presenting lower risks.

Chile's Approach to Addressing the Regional Economic and Financial Crisis

Chile emphasizes maintaining prudent and monetary policies, a flexible exchange rate regime and market-oriented domestic framework policies to promote investment and attract foreign direct investment to address international turbulence:

- Monetary policy is oriented towards achieving an inflation rate target set every year. The overnight real interest rate, the primary instrument used by the Central Bank, was set at 6.5 percent in August 1997, while in January 1998, it was increased to 8.5 percent.
- The fiscal spending growth is maintained close to the potential GDP growth. The budget balance has been in surplus since 1988 (1.9 percent in 1997) and fiscal savings reached 5.5 percent in 1997. The Ministry of Finance has postponed some public investment projects, and, in July 1998, established a budgetary adjustment involving US$ 685 million.
- The Central Bank has a mixed exchange-rate regime under which it allows the nominal exchange rate to float within a band of plus 2.0 percent or minus 3.5 percent (plus or minus 12.5 percent until June 25) around a reference rate pegged to a basket of currencies (US dollar, yen and mark). In order to stabilize the exchange rate fluctuations, international reserves of the Central Bank have diminished in US$ 2,586.9 million from June 1997 to June 1998.
- The system for foreign direct investment (FDI) is open. FDI may enter through two mechanisms, Chapter XIV (general regime) and DL 600 (preferential regime). The reserve requirement for portfolio investment was recently reduced from 30 percent to 10 percent by the Central Bank.
- The regime for private investment is very open; there are only some technical, sanitary, environmental and market regulations.
- Regulations for corporations are established by Law.

Chile: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	41.88	44.47	50.92	65.22	69.22	77.08
Real GDP	12.3	7.0	5.7	10.6	7.4	7.1
Total Consumption	12.7	7.0	7.4	9.2	8.1	7.9
• Private Consumption	13.8	7.4	8.2	9.8	8.8	8.4
• Government Consumption	5.6	4.3	1.9	4.2	3.1	3.3
Total Investment	21.8	21.1	0.8	34.2	7.5	12.8
Exports of Goods and Services	13.9	3.5	11.6	11.0	10.0	9.9
Imports of Goods and Services	21.8	14.2	10.1	25.0	10.7	14.8
Fiscal and External Balances (% of GDP)						
Budget Balance	2.2	2.0	1.7	2.6	2.3	1.9
Merchandise Trade Balance (f.o.b.)	1.7	-2.2	1.4	2.1	-1.6	-1.7
Current Account Balance	2.3	-5.7	-3.1	-2.1	-5.4	-5.3
Capital Account Balance	1.4	5.8	4.2	2.1	6.2	9.5
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	11.8	10.6	12.6	9.3	2.7	5.8
CPI [1]	12.7	12.2	8.9	8.2	6.6	6.0
M2	39.7	33.3	30.1	22.5	26.9	24.7
Short-term Interest Rate [2] (%)	5.5	6.5	6.4	6.1	7.3	6.8
Exchange Rate (Peso/US$)	362.6	404.2	420.2	396.8	412.3	419.3
Unemployment Rate (%)	6.7	6.6	7.8	7.3	6.3	6.1
Population (millions)	13.54	13.77	13.99	14.21	14.42	14.62

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) CPI figures refer to inflation in the 12 months to December of the given year. (2) Short-term interest rate is Pagare Reajustable del Banco Central or PRBC.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	5.0	4.5	4.9	n/a	5.0	n/a	n/a	5.5	n/a	4.0
Real exports	8.0	n/a	-6.7	n/a	n/a	n/a	n/a	6.8	n/a	n/a
Real imports	10.0	n/a	1.6	n/a	n/a	n/a	n/a	8.6	n/a	n/a
CPI	4.5	5.4	n/a	n/a	5.1	n/a	n/a	n/a	n/a	4.0

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998); figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, September 1,1998); figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

THE PEOPLE'S REPUBLIC OF CHINA

In 1997, economic performance in China was characterized by sustained high economic growth with low inflation, as the authorities successfully achieved their goal of effecting a "soft landing" from the mid-1990s period of double-digit growth and double-digit inflation. With improved external balances and rising foreign currency reserves, and having only partially liberalized the capital account, China weathered the economic and financial turbulence in East Asia with few domestic repercussions in 1997. In 1998, the slower growth in key trading partners has made itself felt in China's export demand while the severe flooding in the Yangzte River disrupted domestic production in some provinces in mid-year. However, fiscal and monetary measures have been taken in support of meeting the 8 percent growth target for 1998. With inflation very low and restructuring of state-owned enterprises proceeding, China remains an anchor for regional growth.

GDP

Real GDP growth moderated to 8.8 percent in 1997, 0.8 percentage points lower than the rate of 9.6 percent in 1996. Growth slowed over the course of the year from 9.5 percent in the first half to 8.0 percent in the second half.

The slowing trajectory continued in the first half of 1998, with year-over-year growth slowing to 7.2 percent in the first quarter and further to 6.8 percent in the second quarter. However, growth rebounded to 7.6 percent in the third quarter, supported by a combination of monetary easing and acceleration of planned infrastructure investment. For the first 9 months of 1998, China realized 7.2 percent growth compared with the corresponding year-earlier period. Growth is expected to continue to strengthen in the balance of the year due to the stimulative policy.

The **private sector** continued to gain in importance in China's economy growth in 1997, as the state-owned enterprise sector's share of industrial production declined to 25.5 percent and the share of jobs accounted for by these firms fell to only 15.9 percent.

Investment in fixed assets kept pace with overall economic growth in 1997, expanding by 7.1 percent. The share of investment in GDP declined marginally to 33.4 percent. The share of total investment accounted for by state-owned enterprises remained unchanged from 52.5 percent in 1996. The share accounted for by joint stock companies increased to 5.6 percent in 1997 (1996: 4.5 percent) while the share accounted for by entrepreneurs from Hong Kong, China; Macao; and Chinese Taipei increased to 3.8 percent in 1997 (1996: 3.6 percent). In the first 9 months of 1998, fixed asset investment in the state sector grew by 20.8 percent over the corresponding year-earlier period.

The rapid expansion of **net exports** was a key factor in sustaining strong GDP growth in 1997, as the trade surplus expanded to US$40.3 billion or 4.5 percent of total GDP, up from 1.5 percent in 1996. Growth in trade has slowed sharply in 1998 with merchandise exports up 3.9 percent in the first 9 months of the year over the corresponding year-earlier period (compared to annual growth of almost 21 percent in 1997); and merchandise import growth down to 0.4 percent over the first 9 months (1996 annual growth: 2.5 percent). Reflecting the deceleration in export growth during 1998, merchandise export growth fell to –6.7 percent year-over-year in September, at the same time, import growth has modestly accelerated rising to 0.6 percent year-over-year in September. The merchandise trade surplus for the first 9 months of 1998 was US$ 35.3 billion, ahead of the pace in 1997.

In contrast to the growth in investment and the expansion of the trade surplus, **consumption** grew slowly, at 6.1 percent, including by 5.8 percent in the household sector and 7.2 percent in the government sector. The slowing growth of household consumption reflected several factors, including slowing income growth, rising income inequality, and an increase in the propensity to save, which in turn reflected the sharp reduction in expected inflation.

INFLATION

After three years of double-digit inflation, growth in consumer prices slowed to 8.3 percent in 1996 and substantially further to only 2.8 percent in 1997. CPI growth slowed to only 0.3 percent on a year-over-year basis in the first quarter of 1998 and turned negative in the second quarter, falling by over one percent from the year-earlier period, and by 1½ percent in the third quarter. For the first 9 months of 1998, the CPI averaged –0.7 percent over the corresponding year-earlier period.

The slowing of inflation reflects a number of factors, including the tight fiscal and monetary policies applied for three years, the continued restructuring of industry which increased efficiency in the industrial sector, the continued development of competition in retail and wholesale markets, and three consecutive years of good agricultural harvests, including in 1998.

EMPLOYMENT

China is now experiencing a peak period of labour surplus, reflecting a combination of rapid urbanization, industrialization, and economic restructuring. Accordingly, even with high economic growth, labour market slack has been relatively high and indeed increasing. Job creation and re-employment programs are thus high priorities for public policy. The **urban unemployment rate** was 3.1 percent in 1997.

CURRENT ACCOUNT

The current account surplus in 1997 rose to US$ 29.7 billion, substantially higher than the US$ 7.2 billion in 1996. This reflected largely an increase in the surplus on merchandise trade which more than doubled to US$ 40.3 billion, up from US$ 19.5 billion in 1996. Total exports grew by 20.9 percent to US$ 182.7 billion, while total imports expanded by 2.5 percent to US$ 142.4 billion.

In 1998, the reduction of custom duties, lower import prices due to the currency depreciation of some trading partners in East Asia, and the process of trade liberalization in the world are expected to stimulate China to import more. At the same time, the slower pace of expansion in key trading partners in Asia is expected to slow the pace of export growth. The trade surplus will decrease correspondingly.

EXCHANGE RATE

Since the effective depreciation of the renminbi (RMB) with the unification of China's internal and external exchange rates in 1994, the RMB/US$ exchange rate has remained stable and indeed has even registered a modest appreciation from 8.62 in 1994 to 8.31 in 1996 and further to 8.28 in 1997, a level that it has maintained through the first three quarters of 1998. The RMB has been supported in this period by four years of continuous current account surplus, significant improvement in domestic inflation performance, strong inflows of foreign direct investment (which reflected the high capital demand in the domestic market) and the abundance of foreign reserves. With these fundamentals being sustained, the exchange value of the RMB is expected to remain stable.

FOREIGN DIRECT INVESTMENT

Foreign direct investment (FDI) reached a new record high of US$ 45.3 billion in 1997, up 8.5 percent over 1996. Inflows from Hong Kong, China accounted for the largest share – almost half of the total FDI. Inflows from Japan, Chinese Taipei, and the USA were next most important, accounting for approximately 9 percent each of the total. In 1997, FDI flowed mainly into the manufacturing and services sectors as well as into the property market. As before, the inflow of net capital continued to increase, rising to US$ 22.9 billion in 1997. The inflow and outflow of short-term investment were approximately in balance.

In 1997, total foreign debt was US$ 131.0 billion or 14.8 percent of GDP. The ratio of debt service (principal plus interest) to export earnings equaled 7.3 percent. The two ratios were well within international norms.

FISCAL POLICY

The fiscal policy stance in 1997 was one of moderate restraint with an emphasis on containing the growth in government spending, improving tax administration and collection, and optimizing the structures for fiscal payments and income management. As well, the government continued to implement industrial structural reforms while increasing investment in infrastructure.

Total fiscal revenue in 1997 was US$ 104.4 billion, 16.7 percent more than in 1996. Total expenditure was US$ 111.1 billion, up 15.9 percent over 1996, resulting in a fiscal deficit of US$ 7.0 billion or 0.78 percent of GDP, almost the same as in 1996. In 1997, the government raised US$ 25.7 billion through bond issues, up from US$ 24.1 billion in 1996.

MONETARY POLICY

Reflecting the tightening of monetary policy, M2 growth has declined steadily from the 30 percent range in the first half of the 1990s to 25 percent in 1996 and further to 19.6 percent in 1997. This was an important factor in alleviating inflationary pressures in the economy. However, with real GDP growth moderating and inflation rapidly decelerating in the last two years, the monetary policy stance has shifted progressively towards supporting economic activity. The People's Bank of China has made five reductions in interest rates since May 1, 1996, the most recent coming in July 1998.

MEDIUM-TERM OUTLOOK

With the spread of the financial crisis, world economic growth is expected to slow in 1998 and the near future, with spillover effects on global trade, particularly in East Asia, and consequent implications for China's medium-term economic prospects. At the same time, the period 1998 to 2001 will be a crucial period for China's restructuring from a planned economy to a market economy. Government objectives for this period are moderately high economic growth, low inflation and a reasonable unemployment rate.

Real GDP: average GDP growth during the period 1998 to 2001 is forecast to be 8 percent or so, supported by balanced expansion of domestic demand (including both consumption and investment) and export growth. The share of primary industry in GDP is expected to keep declining, falling to 18 percent by the year 2001, down 2.2 percentage points from the end of 1996. By contrast, the secondary sector is projected to increase its share to 52 percent, 3 percentage points up from the end of 1996, as the manufacturing sector continues its rapid development. The share of the tertiary sector is expected to increase marginally over this period.

Inflation: with consumer prices falling in 1998, and global inflation well in check, China is well positioned to match or better the 4 percent annual inflation targets for the period to 2001. Moreover, the decline in prices has opened up the possibility for monetary policy to be cautiously eased in support of strengthening economic growth. China's economic history shows that every past episode of serious inflation was directly related to shortages of agricultural products. The recent technological improvements and increased investment in agriculture should help to maintain a high level of agricultural production, an important guarantee for low inflation rates.

Unemployment: over the period 1998 to 2001, China's urban registered unemployment rate is estimated to rise to about 3.5 percent. During this period, China will see eleven million new labour market entrants each year. With the restructuring of the state-owned enterprises continuing, this sector will have limited ability to absorb additional workers. Accordingly, the fundamental solution to the problem of unemployment will be further development of the private sector of the economy.

External balances: China is expected to remain in surplus on merchandise trade and the current account over the period to 2001. The rapid development of the tourist industry is also hoped by the government to improve the situation on the services account. While the international financial crisis has had comparatively little influence on China's domestic financial markets, the growth in China's foreign reserves has flattened out in 1998 and the government has taken measures to control the outflow of foreign currency. The exchange rate of the RMB is expected to remain stable.

China's Measures to Address the Financial Crisis

China weathered the economic and financial turbulence in East Asia in 1997 because of its sound external balances and rising foreign currency reserves, and having only partially liberalized the capital account. In 1998, the slower growth in key trading partners has made itself felt in China's export demand. The stimulative measures announced to respond to the domestic concerns of rising unemployment, declining price levels and weaker competitive position internationally from the real exchange rate appreciation experienced vis-a-vis the crisis-hit economies of East Asia are expected to support more rapid expansion in the second half of 1998 (although the disruption to economic activity from the severe flooding of the Yangtze River in mid-year may offset that in part). The following are the main measures adopted by China:

Monetary and Exchange Rate Policy measures include:

- Implementation of tight monetary policy in 1997.
- In 1998, monetary policy was moderately lessened to stimulate domestic demand in support of meeting the 8 percent target growth rate.
- Maintaining stability of the exchange rate.
- Foreign trade enterprises were given the right to control 15 percent of their foreign exchange.

Banking and Financial Sector measures include:

- Interest rates have been adjusted downwards twice in 1998, a unified savings reserve account was established and the Central Bank's reserve ratio and rediscount rate were both reduced to stimulate demand.
- Stopping free allocation and introducing monetary mechanism into the housing area from July 1, 1998 to diversify residents' personal assets.

Trade- and FDI-related measures include:

- Open most of industries to foreign direct investment, and encourage foreign businessman to invest in high-tech industry, infrastructure and enterprises' technology transformation.
- Cut import tariffs and increase export refund rates of some products to foster trade.

Fiscal policy

- Implement moderately expansionary fiscal policy, facilitate structural adjustment, and issue more government securities to increase fiscal revenue.

State-owned Enterprise reform

- Accelerating the transformation and reorganization of state-owned enterprises, and encouraging private investment.
- Accelerating the establishment of a modern enterprise system and modern banking supervision system.

China: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	483.0	601.1	540.9	697.7	816.9	903.0
Real GDP	14.2	13.5	12.6	10.5	9.6	8.8
Total Consumption	14.2	9.3	8.0	9.2	9.3	6.1
• Private Consumption	14.3	9.4	7.7	10.1	9.6	5.8
• Government Consumption	13.6	9.1	9.1	5.9	8.4	7.2
Total Investment	12.9	24.9	15.6	15.5	10.4	7.1
Merchandise Exports	18.2	8	31.9	22.9	1.5	20.9
Merchandise Imports	26.3	29	11.2	14.2	5.1	2.5
Fiscal and External Balances (% of GDP)						
Budget Balance [1]	-0.97	-0.85	-1.23	-1.00	-0.78	-0.78
Merchandise Trade Balance (f.o.b.)	0.87	-2.03	0.99	2.41	1.51	4.46
Current Account Balance	1.33	-1.98	1.42	0.23	0.88	3.3
Capital Account Balance	-0.05	3.91	4.68	4.74	4.89	2.54
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	7.9	14.6	19.5	13.1	6.1	1.5
CPI	6.4	14.7	24.1	17.1	8.3	2.8
M2	31.3	32.4	34.5	29.5	25.3	19.6
Short-term Interest rate [2] (%)	8.1	8.8	9.0	9.0	9.72	7.65
Exchange Rate (RMB/US$)	5.50	5.76	8.62	8.35	8.31	8.28
Unemployment Rate (%)	2.3	2.6	2.8	2.9	3.0	3.1
Population (millions)	1,172	1,185	1,199	1,211	1,224	1,236

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Not including domestic and foreign debts (2) Short-term interest rate refers to 6 months interest rate.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	8	5.5	7.4	7.2	7.2	8	n/a	9.1	6.8	7.5
Merch. Exports	3.0	n/a	7.1	3.0	n/a	5.0	n/a	7	3.0	n/a
Merch. Imports	3.0	n/a	10.9	12	n/a	9.0	n/a	9.6	12	n/a
CPI	0.3	0	2.3	4.0	1.2	3.0	n/a	5.8	6.0	2.0

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998). The LINK forecast is from the World Outlook (Project LINK, September 1, 1998); growth projection for 1998 is for GNP; the figures for the period 1999-2001 refer to 1999 only. The ADB forecast is from the Asian Development Outlook 1998; the figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); the growth projection for 1998 is for GNP; figures for the period 1999-2001 refer to 1999 only.

HONG KONG, CHINA

The Hong Kong, China economy was buoyant in the first half of 1997, bolstered by growing confidence and rising optimism about its outlook after the historic reunification with China in July. Yet dampened by the pronounced impact of the regional financial turmoil that has been sweeping through East Asia since mid-1997, local interest rates rose in October, while the local stock and property markets faced a marked correction. As a result, economic activity in Hong Kong, China slackened towards the end of the year. In 1998, as the Asian financial crisis became progressively reflected in a deep regional economic downturn, the Hong Kong, China economy slipped into its first recession since the mid-1980s.

Real GDP

Real GDP grew by about 5.3 percent in real terms in 1997 as a whole, slightly faster than the 4.6 percent growth in 1996; however, it slowed over the course of the year from an average of 6.2 percent in the first three quarters of 1997, on a year-over-year basis, to around 2.8 percent in the fourth quarter. In the first quarter of 1998, real output fell by 2.7 percent over the year-earlier period, and by 5.2 percent in the second quarter, leaving real GDP in the first half of 1998 4.0 percent below its year-earlier level.

In 1997, economic growth was largely **domestic-demand** driven. Investment in **machinery and equipment** was robust as the economy continued to automate and mechanize. **Construction** also registered solid growth in 1997, as robust building activity at private sector sites more than offset the decline in civil engineering activity at public sector sites following completion of most of the projects on the new airport.

Consumer spending accelerated to 6.2 percent growth in 1997, its strongest performance since 1994. Growth was concentrated in the first three quarters of 1997, with particularly strong sales in high-value items such as motor vehicles and consumer durables leading the way. However, spending slackened considerably following the spread of contagion to Hong Kong, China in October 1997, reflecting the impact of higher interest rates, the wealth effects stemming from the declines in property values and equity prices, rising unemployment and the general dampening effect of the crisis on consumer sentiment. The sharp cutbacks to consumer spending in the first half of 1998, which saw private consumption expenditure fall 4 percent in real terms from a year earlier, contributed substantially to the decline in real GDP in this period.

Two-way **trade** expanded more rapidly in 1997 than in 1996 with exports of goods and services up 5.2 percent on the year (1996: 5.3 percent) and imports up 6.9 percent (1996: 4.2 percent). However, trade flows dropped sharply in the first half of 1998 reflecting the plunge in import demand throughout the region. **Exports of services** also slowed down after mid-1997 amidst reduced travel demand from within Asia. There have been encouraging signs of recovery in inbound tourism in recent months following the Government's specific facilitation measures to boost tourism.

For 1998 as a whole, taking into account the present external and domestic environments, Hong Kong, China's real GDP is forecast to contract by around 4 percent. Externally, the weak economic situation in the region, particularly in Japan, will continue to curtail Hong Kong's overall export performance but exports to the United States and the European Union should provide a partial offset. Locally, consumer sentiment is likely to remain subdued so long as income remains under downward pressure, and the asset markets remain weak. High interest rates and tight credit locally will also continue to restrain private investment. The recovery in inbound tourism, meanwhile, may render some support to exports of services.

Yet, the flexibility of costs and prices has resulted in speedy adjustments to uphold competitiveness: wages are softening and property prices and rentals have already fallen substantially from their peaks in 1997. As a result both the cost of living and the cost of doing business in Hong Kong have moderated. The local workforce is adapting promptly to the more difficult employment conditions, and the corporate sector is slimming to cut costs and achieve greater operational efficiency. Once the regional environment and the local sentiment improve, these will provide Hong Kong with a strong basis for expeditious return to positive growth.

INFLATION

Consumer price inflation, as measured by the Composite Consumer Price Index has been on a decelerating trend. Average increase in the index slowed to 5.8 percent in 1997, down from 9.1 percent in 1995 and 6.3 percent in 1996. It moderated distinctly further to 4.1 percent over the first nine months of 1998 (including to a low of 2.5 percent year-over-year in September 1998). Contributing to this good inflation performance was a decline in import prices that reflected the relative strength of the US dollar, generally soft world commodity prices, and low inflation in the major supplier economies. Domestically generated inflationary pressures have receded to a considerable extent, reflecting internal cost/price adjustments in response to the impact of the regional financial turmoil. For 1998 as a whole, consumer price inflation is thus forecast to fall to 3.5 percent, the lowest in 13 years.

EMPLOYMENT

Labour market conditions had been tightening in the first three quarters of 1997, along with the concurrent pick-up in economic activity. It then took a negative turn in the fourth quarter, following the correction in the asset markets and the slackening in local demand as the contagion effect of the regional financial turmoil spread to the local economy. In face of the continued economic downturn and an uncertain business outlook, some employers had moved to downsize their workforce since the beginning of 1998. In the third quarter of 1998, the seasonally adjusted unemployment rate and the underemployment rate had risen to 5.0 percent and 2.6 percent respectively, compared with 2.2 percent and 1.0 percent in the year-earlier period.

CURRENT ACCOUNT

In 1997, the combined visible and invisible trade account incurred a deficit of HK$47 billion, equivalent to 3.5 percent of GDP. Although this ratio was larger than the 1.4 percent registered in 1996, it was down from 4.3 percent in 1995. To a considerable extent, the widened gap in 1997 was attributable to a larger intake of material inputs and capital goods for production and business expansion, which led to a larger visible trade deficit. Meanwhile, the invisible trade surplus remained sizable in 1997, providing a substantial offset to the visible trade deficit.

The visible trade deficit narrowed significantly in the first eight months of 1998 (to 7.4 percent of the value of total imports, down from 11.4 percent of total imports in the same period in 1997). The invisible trade balance should also strengthen progressively along with the envisaged revival in inbound tourism. For 1998 as a whole, the combined visible and invisible trade deficit is projected to fall back to HK$9 billion, representing 0.6 percent of GDP.

EXCHANGE RATE

Throughout 1997 and the first half of 1998, the market exchange rate of the Hong Kong dollar against the US dollar continued to stay on the strong side of the linked rate fixed at HK$7.80 to US$1. The Hong Kong dollar withstood several speculative attacks since the financial crisis spread in late 1997. It is underpinned by robustness of the linked exchange rate regime, strong economic fundamentals, a well-supervised and generally healthy banking sector, tight fiscal discipline and strong reserves.

The market exchange rate of the Hong Kong dollar against the US dollar closed the third quarter of 1998 at HK$ 7.745 to US$ 1, little changed from a year earlier. The Effective Exchange Rate Index of the Hong Kong dollar, after rising by 10.1 percent during 1997, edged down slightly by 0.9 percent during the first nine months of 1998.

FISCAL POLICY

In fiscal year 1997/98, the government attained a budget surplus of around HK$ 80.9 billion, equivalent to 6.0 percent of GDP. With the introduction of special relief measures in late June 1998, there is likely to be a fiscal deficit in fiscal year 1998/99. Because of the economic downturn, the fiscal deficit may be substantially more than the HK$ 20 billion announced in June.

MONETARY POLICY

The primary objective of Hong Kong China's monetary policy continues to be maintaining stability in the external value of the Hong Kong dollar against the US dollar, at a fixed rate of HK$ 7.80 to US$ 1.

FOREIGN DIRECT INVESTMENT

The total stock of inward foreign direct investment (FDI) amounted to HK$609 billion (US$79 billion) at the end of 1996, representing an increase of 14 percent over the end of 1995. The United Kingdom remained the largest source of inward FDI, accounting for 28 percent of the total. It was followed by the mainland of China (with a share of 19 percent), the United States (18 percent) and Japan (15 percent). Of this investment, 92 percent was in the non-manufacturing sectors, particularly banking and finance, and in the wholesale, retail and import/export trades.

There are no official data on Hong Kong, China's outward FDI. Based on statistics released by some of the host economies, Hong Kong, China is known to have invested heavily in East Asia, particularly in the mainland of China. As of the end of June 1998, the cumulative value of Hong Kong, China's realized direct investment in China amounted to US$ 130 billion, accounting for 54 percent of total FDI in China.

MEDIUM-TERM OUTLOOK

While the short-term economic prospects of Hong Kong, China are overshadowed by the market turbulence in the region, the underlying fundamentals remain strong and the economy as a whole is displaying the flexibility required for it to weather the impact of the regional financial turmoil. In particular, banks' finances are generally healthy and capital ratios remain high. According to the Hong Kong Monetary Authority, all local banks remained profitable in the first half of 1998, having withstood extreme pressure for 10 months since the onset of the crisis. The Government holds substantial fiscal and foreign exchange reserves and is not burdened by any public debt. The corporate sector is slimming and rationalizing its operations for greater efficiency and competitiveness. Inflation is moderating.

Medium-term prospects are, of course, influenced to a considerable extent by the pace of recovery in East Asia. Domestically, investment spending on building and construction is expected to strengthen progressively, supported by public sector activity and in particular by implementation of a number of major infrastructure projects in the coming years. Externally, the sustained growth and further reform and opening-up in China should continue to present Hong Kong, China with abundant business opportunities. The on-going process of global trade liberalization and continued growth in many of the industrialized economies should also provide support. While a rapid rebound in regional economic activity is not projected for 1999, progressive stabilization of financial conditions in the region will permit an easing in credit conditions, paving the way for a revival of private investment and consumer spending on durable goods in the ensuing years, as well as a rebound in trade from the very low levels that resulted from the severe compression of import demand in the most affected economies. Overall, real GDP is forecast to grow at a trend rate of about 4 percent for the period 1999-2002.

Hong Kong, China’s Measures to Address the Regional Financial Crisis

Hong Kong, China has addressed the crisis by maintaining its commitment to a market-oriented economic policy and in particular to the linked exchange rate system that ensures stability of the Hong Kong dollar. Fiscal measures have been taken to mitigate the effects of the contraction in private sector spending.

The Hong Kong Monetary Authority (HKMA) implements the exchange rate policy by strictly observing the monetary rule of a currency board system under which any change in the monetary base is brought about only by a corresponding change in foreign reserves in the specified currency (i.e., the US dollar) at the fixed exchange (in this case 7.8 to 1). Full transparency is maintained by publishing the reserves and the aggregate balances in the clearing accounts of the banking system. During periods of capital outflow, as occurred from time to time during speculative attacks on the Hong Kong dollar, the monetary base shrinks, leading to the higher interest rates that were observed during these periods. The HKMA has introduced a few measures with a view to easing credit tightening amidst the Asian financial turmoil. These include, for example, exempting interest income on deposits placed with authorized institutions in Hong Kong, China from profits tax, development of the Hong Kong dollar repo market and schemes to make fuller use of the liquidity available at the Hong Kong Mortgage Corporation. As well, strict adherence to the rule does not prevent the government from funding a budget deficit by drawing down its fiscal reserves that are held in foreign assets in the Exchange Fund. Nor does it preclude portfolio shifts by the government of assets that it holds outside the balance sheet of the currency board.

The automatic workings of the currency board mechanism can make it vulnerable to so-called “double plays” on currency and stock futures markets. This speculative maneuver involves building up holdings of the local currency while adopting a short position on the stock market. The subsequent selling of the currency triggers the automatic contraction of the monetary base under the currency board mechanism, pushing up interest rates and potentially creating extreme conditions in the interbank market. This in turn has a predictable effect of triggering a decline in the stock market, which then permits short sellers to take profits. As explained by Joseph Yam, Chief Executive of the HKMA, on occasions when there was evidence of currency manipulation, the government used the measures available to it to intervene in the Hong Kong, China stock market in order to frustrate successful execution of such “double plays”. These extraordinary measures were not taken to support any particular level of stock valuation and did not represent a departure from the traditional policy of “positive non-interventionism”.[1]

In order to offset the impact of the economic slump on the job market, the government also unveiled on June 3, 1998 a series of measures aimed to create 100,000 jobs over the period to the end of 1999. The HKMA has introduced a few measures with a view to easing credit tightening amidst the Asian financial turmoil. These include, for example, exempting interest income on deposits placed with authorized institutions in Hong Kong, China from profits tax, development of the Hong Kong dollar repo market and schemes to make fuller use of the liquidity available at the Hong Kong Mortgage Corporation.

[1] See Joseph Yam, “Why We Intervened”, Asia Wall Street Journal, 20 August, 1998.

Hong Kong, China: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	100.7	116.0	130.8	139.2	154.1	173.0
Real GDP	6.3	6.1	5.4	3.9	4.6	5.3
Total Consumption	8.3	6.9	6.4	1.7	4.6	6.2
• Private Consumption	8.5	7.5	6.7	1.6	4.7	6.7
• Government Consumption	7.2	2.2	3.9	3.2	4.0	2.4
Total Investment	11.5	0.3	24.8	18.2	-1.5	13.3
• Private Investment	12.3	-4.3	26.1	17.6	-4.5	17.0
• Government Investment	5.2	39.3	17.1	22.0	17.1	-4.8
Exports of Goods and Services	18.3	12.7	9.8	11.0	5.3	5.2
Imports of Goods and Services	20.8	12.0	13.5	12.7	4.2	6.9
Fiscal and External Balances (% of GDP)						
Budget Balance	2.8	2.1	1.1	-0.3	2.2	6.0
Merchandise Trade Balance (f.o.b.)	-4.3	-3.3	-8.4	-14.1	-11.9	-12.2
Current Account Balance	5.3	7.0	1.2	-4.3	-1.4	-3.5
Capital Account Balance	n/a	n/a	n/a	n/a	n/a	n/a
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	9.7	8.5	6.9	2.5	5.8	6.8
CPI	9.6	8.8	8.8	9.1	6.3	5.8
M2	14.3	26.9	18.7	15.1	19.3	9.9
Short-term Interest rate [1] (%)	3.89	3.39	4.76	6.17	5.46	7.12
Exchange Rate (HK$/US$)	7.741	7.736	7.728	7.736	7.734	7.742
Unemployment Rate (%)	2.0	2.0	1.9	3.2	2.8	2.2
Population (millions)	5.8	5.9	6.0	6.2	6.3	6.5

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Short-term interest rate is 3-month HIBOR average.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	-4	-5.0	-3.1	3.0	0.9	4.0	0	2.6	3.5	3.8
Real exports	-2.5	n/a	-1.5	2.2	n/a	n/a	n/a	5.7	3.5	n/a
Real imports	-3.2	n/a	-4.6	1.0	n/a	n/a	n/a	3.7	6.0	n/a
CPI	3.5	3.0	n/a	4.5	4.3	n/a	2.8	n/a	5.0	3.5

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998), figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, September 1,1998), figures for the period 1999-2001 refer to 1999 only. The ADB forecast is from the Asian Development Outlook 1998; figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

THE REPUBLIC OF INDONESIA

For several decades leading up to the regional economic and financial crisis that started in mid-1997, Indonesia had experienced a period of remarkable economic performance. The strategy of prudent macro economic policies and gradual structural reforms had been successful in transforming the Indonesian economy. Since the 1970s, economic growth averaged 7 percent per annum, raising GDP per capita toward the level of middle income countries. Macroeconomic balance had been maintained: the budget had been balanced, inflation had been maintained at relatively low levels, current account deficits had been kept moderate, and international reserves had been remained at comfortable levels.

This strong economic performance continued in 1996 when real GDP grew by 8 percent, while firm fiscal and monetary policies helped to reduce inflation to 6.5 percent. On the external side, high import growth and weaker export performance widened the current account deficit to around 3.4 percent of GDP. However, strong foreign capital inflows boosted foreign exchange reserves to almost US$ 26 billion, equivalent to six months of imports.

Despite this strong macroeconomic performance, there were a number of underlying weaknesses. Structural rigidities arising from regulations in domestic trade and production impeded economic efficiency and competitiveness. At the same time the relative stability of the rupiah during most of the 1990s, together with high rates of return on domestic investment, both encouraged and facilitated high levels of private foreign borrowing. Also, the rapid expansion of the financial system since the 1980s left a number of banks with significant amounts of non-performing loans. Banks were also exposed to a potential downturn in the property sector, as this lending bad grown rapidly in the three years leading up to the crisis.

These weaknesses made Indonesia vulnerable to adverse external shocks when contagion effects from the regional currency crisis led to an abrupt shift in foreign exchange market sentiment towards the rupiah in the middle of July 1997. From mid-July 1997 to end-July 1998, the cumulative depreciation of the rupiah reached more than 70 percent, with over half of this decline occurring since the end of November 1997. At the same time, the Jakarta stock exchange index declined by more than 50 percent. Both the exchange rate and stock market declines were the largest in the region.

The steep decline in the value of the rupiah has led to very large increases in the rupiah debt service costs of banks and corporations that had borrowed abroad. These problems have been compounded by the associated rise in domestic interest rates which further added to the debt service burden of corporations and created refinancing problems for financial institutions, particularly those that were already weak.

GDP

Real GDP growth in 1997 decelerated to 4.6 percent from 8.0 percent in 1996. This was mainly due to the tightening of monetary and fiscal policy by the authorities in the second half of the year to stabilize the economy following the onset of the financial turbulence. Domestic demand growth declined across most components. Private consumption slowed to 4.5 percent growth and government consumption was cut to only 1.5 percent. With the rise in domestic interest rates, private investment growth slowed to 4.5 percent. While government investment expanded by around 14 percent, this reflected primarily the impact of the depreciation in inflating the cost in rupiah of government expenditures under contracts denominated in foreign currencies.

In 1998, economic activity contracted sharply in each of the first two quarters, leaving real GDP in the first half 12.2 percent below its year-earlier level. With the exception of some agricultural and public utility sectors, almost all sectors of the economy experienced negative growth in this period. The largest output declines occurred in construction, commerce, financial services and manufacturing. For 1998 as a whole, the contraction in real GDP is projected to be around 13-14 percent.[1]

INFLATION

After three years of inflation averaging about 9 percent in the mid-1990s, consumer price growth started to decline significantly, falling to 6.6 percent in 1996 and to 5.1 percent in July 1997. Beginning in August 1997, however, inflation started to rise. This reflected primarily supply side pressures as the rupiah depreciation led to substantial increases in import prices while, on the domestic side, the long drought resulted in supply shortages of key foodstuffs leading to rising prices for these commodities. For 1997 as whole, the inflation rate rose to 11.05 percent.

In 1998, inflation accelerated sharply with the CPI growing by a cumulative 75.4 percent over the first nine months of the year pushing the year-over-year inflation rate to 82.4 percent in September. The main factors behind this high inflation were sharp increases in the prices of food and other essential items, reflecting the direct effect of the depreciation of the rupiah, the disruption of the distribution system of essential goods, and domestic supply shortages. In light of these adverse developments, the annual inflation rate is likely to reach around 90-100 percent in the year to December 1998. On an annual average basis, the IMF projects an inflation rate of 60 percent in 1998.[2]

EMPLOYMENT

The economic crisis in Indonesia has led to a significant rise in unemployment with approximately 2 million workers losing jobs as companies restructured through

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[1] This is consistent with the most recent estimate from the Central Statistics Bureau that the economy shrank by 13.6 percent in the year to September 1998. At the same time, the Bureau projected a contraction of 13.2 percent for the year as a whole.

[2] IMF, World Economic Outlook, September 1998.

mergers and consolidations to increase their efficiency, and an additional 2.7 million new job seekers entering the labour market at a time of no job creation. Of particular note is that job losses during the crisis have disproportionately hit “white collar", as restructuring companies laid off professional staff. This situation is expected to continue until business activity recovers. Reflecting these developments, the open unemployment rate is projected to increase to around 11 percent in 1998 from around 6 percent in 1997.

CURRENT ACCOUNT

The current account deficit decreased from US$ 7.7 billion (3.4 percent of GDP) in 1996 to US$ 5.9 billion (2.7 percent of GDP) in 1997. Due to the rupiah depreciation, exports of goods recorded 11.5 percent growth in 1997, reaching US$ 55.8 billion while imports of goods grew only 5.3 percent at US$ 46.4 billion. The services account still registered a deficit of US$ 19.5 billion, which reflected primarily freight expenses and interest payments on foreign loans.

In the first half of 1998, with the continued depreciation of the rupiah, non-oil/gas imports declined by 22.4 percent, while non-oil/gas exports grew by merely 4.8 percent. Accordingly, the current account is projected to record a surplus of 2 percent of GDP in 1998/99.[3] However, this positive development will not lead to a sustainable economic recovery path since it is largely owing to a substantial decline in non-oil/gas imports rather than increased exports.

EXCHANGE RATE

In July 1997, as the rupiah began to feel spillover effects from the spreading regional crisis, Bank Indonesia widening the intervention band from 8 percent to 12 percent.[4] In addition, monetary policy was tightened to counter speculative activities. Nevertheless, the pressure on the rupiah continued to mount and, on 14 August 1997, the intervention band was removed and Indonesia switched to a free floating exchange rate system. With these developments, the exchange rate moved from Rp/US$ 2,450 at the end of the 2nd quarter of 1997, to 4,650 at year-end 1997, a depreciation of 47 percent.

In 1998, the rupiah has traded over a very wide range and exhibited considerable volatility from month to month and often in daily trading as well. Through the first three quarters, the exchange rate has averaged about 10,500 to the US dollar, or a little over 75 percent less than its pre-crisis value. During this period, monthly averages have ranged from a high of 7,950 in April to a low of 13,535 in June. Daily rates have moved well outside even this very broad range of approximately +/- 25 to 30 percent.
The major developments in 1998 were as follows:

- In early January, the rupiah fell steeply with other Asian currencies as markets opened the New Year in a bearish mood on Asia. The pressure on the rupiah was

[3] This is consistent with the IMF’s projection of current account surpluses of 2.5 and 2.7 percent of GDP in 1998 and 1999 respectively. See IMF, World Economic Outlook, September 1998, p. 84.

[4] The band had been widened to 8 percent in September 1996 from 2 percent previously.

exacerbated by rumours, which proved to be unfounded, concerning the health of President Soeharto. The selling pressure took the rupiah for the first time through the 10,000 mark to finish the month at 10,375 to the US dollar.

- From its January low, the rupiah showed some signs of stabilization and strengthening over the next 3 months, moving into the trading range of 7,500 to 8,500 to a dollar, sharing to some extent in the general improvement in Asian markets over this period. The open discussion of a possible move to a Currency Board System (CBS) to stabilize the exchange rate system at a higher value also lent some speculative support to the exchange rate in this period. However, the CBS approach met with objections from local economists as well as from the IMF as being unlikely to work in Indonesia's current circumstances, and the free floating exchange rate regime was retained.
- Prospects for further strengthening at the beginning of May were based on expected progress in private debt restructuring, implementation of banking reforms and the successful conclusion of the negotiations with the IMF on a support package. However, the social unrest that occurred in May 1998, against the background of declining hopes for an early recovery in Asia as the first quarter statistics started to be released around the region, further undermined confidence in the Indonesian economy. With confidence at an unprecedented low level, pressure on the rupiah was renewed and it depreciated further, breaking through the Rp 15,000 per US dollar mark at times in June.
- Concerted efforts to revive market confidence have led to a subsequent strengthening of the rupiah. Key factors that had a favourable impact on market sentiment include: the completion of the second review of the IMF stand-by arrangement in mid-July, the reduction of the demand for dollars following the exchange offer for interbank-debt that lengthened maturities to 4 years, the renewed financial support from the international financial institutions that was secured for the economic stabilization and restructuring program under IMF coordination, and the fast disbursement of loans from the Consultative Group on Indonesia (CGI) at end-July. As a result, the rupiah strengthened from its second quarter closing value of 14,900 per US dollar moving back well below the 10,000 mark against the US dollar in early fourth quarter trading (including to a most recent high of 6,800 on October 21, 1998, its strongest value since mid-January 1998, on optimism that the economy is bottoming out). With these developments, the rupiah is likely to have a 1998 annual average of roughly 10,000 to the US dollar, down on the order of 70 percent from its annual average of 2,910 in 1997.

FISCAL POLICY

The total domestic revenues in Fiscal Year 1997/98 came in at Rp 108.5 trillion, marginally above the Planned Government Expenditure and Revenue Budget (RAPBN). Meanwhile, the development revenues came in at Rp 23.8 trillion. The driving force of the total domestic revenue was the increase of oil/gas revenue (77.7 percent) that resulted from weakening rupiah value and a higher Indonesian Crude Oil Price (ICP) as compared to the projected price in the 1997/98 state budget. On the other side, with the decline in business activity, tax revenue grew at only a slightly higher pace (14.8 percent) than that in the preceding years despite the higher than expected price levels.

Total expenditures in 1997/98 came in at Rp 131.5 trillion. This represented a considerable increase as compared to that in the previous year, largely because actual expenditures surpassed budgeted levels as the depreciation of rupiah induced mounting foreign exchange expenditures, especially in terms of interest payments and subsidies for fuel and basic needs.

The 1998/99 fiscal plan called for a balanced budget with expenditures rising 111 percent over the preceding year to Rp 277.1 trillion, based on assumptions of -12 percent GDP growth and 66 percent inflation. Domestic revenue is expected to increase to Rp 149.3 trillion of which Rp 99.5 trillion is expected to come from non-oil revenue. The changed short-term economic outlook will affect these figures.

MONETARY POLICY

Since the onset of the regional economic crisis, Indonesia's monetary policy has been confronted with a number of difficult challenges: to stabilize the external value of the rupiah, to help shore up the financial soundness of the banking system, to contain soaring prices, and to support the restoration of economic stability more generally.

As regards the exchange rate, the measures taken, as described above, included first widening the intervention band from 8 percent to 12 percent, the subsequent removal in mid-August of the intervention bands altogether and the adoption of a floating exchange rate system, and direct intervention from time to time in the foreign exchange market. As well, in the early stages of the crisis, Bank Indonesia tightened rupiah liquidity to support the exchange rate. These measures helped to slow the growth of the broader monetary aggregates considerably over the course of 1997, with M2 growth falling from year-on-year rates of 25.5 percent in June to 23 percent by November.

As the crisis progressed, the banking system difficulties intensified. Currency and term mismatches exposed some banks to exchange rate and interest rate risk. At the same time, falling public confidence in the banking system led to massive withdrawals of public funds. The banks, facing severe balance sheet problems, were unable to lend. This triggered further difficulties in the industrial sector, as corporations were unable to raise working capital or to rollover loans, leading to slowing economic activity and mounting payments arrears throughout the economy. To forestall systemic collapse, Bank Indonesia took the costly step of expanding central bank liquidity support to the banking system; as a result, base money increased by 17.6 percent from January levels up to end-August 1998. It is to be noted, however, that the money multiplier has fallen sharply, because the banking system difficulties have led to what is effectively a structural increase in the demand for currency. With these measures, currency in circulation nearly doubled from Rp 28.4 trillion at end-1997 to Rp 52.1 trillion at end-July 1998. During the same period the annual growth of money supply (M1) jumped from 22.2 percent to 57.2 percent.

In order to accelerate the restoration of stable economic conditions, Indonesia has had recourse to support from the multilateral financial institutions, as well as to bilateral financial support. This support is being made available in the context of a comprehensive policy package that includes bold reforms to remove structural rigidities, improve fiscal transparency, and restore the banking system to financial health. An important component of the policy package is the commitment to prudent monetary and exchange rate policies aimed at moderating inflation and supporting the external value of the rupiah. For 1998, a well defined monetary policy framework and clear inflation objectives have been established, in support of which Bank Indonesia plans to limit the growth of broad money to 26.7 percent in 1998.

FOREIGN DIRECT INVESTMENT

FDI approvals have increased rapidly following liberalization of the foreign exchange regime. FDI inflows showed a steep rise from an average of US$ 9 billion in 1990-93 to US$ 29.9 billion in 1996 and then a further 13 percent rise to US$ 33.8 billion in 1997.

The tertiary sector, and particularly housing hotels and restaurants attracted the largest portion. By economy of origin, a large portion of FDI has come from Japan; the United Kingdom; Hong Kong, China; and Singapore.

MEDIUM-TERM OUTLOOK

It is expected that the decline in output will bottom out by early next year and that positive economic growth will resume no later than 2000. Inflation is to be reduced to a single digit annual rate within no more than three years. The present level of the overall budget deficit is unsustainable, and the intention is to cut it at least in half by year 2000, and restore the budget to close to balance within three years.

Indonesia's Measures to Address the Financial and Economic Crisis

The stabilization and reform program that Indonesia has been put into effect is expected to provide the basis for economy recovery as well as to strengthen the economic foundations for sustained longer-term growth. The main structural elements of the reform program for the period up to 2000 include further deregulation, trade liberalization and privatization of state enterprises. The reforms are being monitored closely by a high level group, under the direction of the Secretary General of the Economic and Monetary Resilience Council. The following are the main measures adopted by Indonesia to respond to the crisis:

Monetary and Exchange Rate Policy measures include:

- Bank Indonesia is given full authority to conduct and implement monetary policy.
- Free floating exchange rate system is adopted.
- The Indonesian Debt Restructuring Agency (INDRA) that provides protection against exchange rate risks and assures availability of foreign exchange for Indonesian debtors is established.
- The mechanism of Open Market Operation (OMO) is revised.

Banking and Financial Sector measures include:

- The Indonesia Banking Restructuring Agency (BPPN) is established.
- Liquidation of 16 insolvent banks and suspension of 10 insolvent banks, and merger of four state banks into one bank.
- The government provides a guarantee for banks' deposit and other claims, such as borrowing, guarantee and Letters of Credit issued by the banks.
- Limitation on property credits for acquiring and processing of land, except for simple and very simple houses.
- New facility on swap and forward buy transactions is provided for certain exporters (for prominent commodity), while limitations are imposed on forward sell contracts.
- Statutory reserve requirements for foreign currency deposits lowered from 5 to 3 percent.
- Increase of the interest rate of Bank Indonesia Certificate (SBI) gradually.
- Bank Indonesia placed US$ 1 million with 10 internationally reputable foreign banks that will act as confirming banks for Letters of Credit granted by appointed Indonesian banks.

Trade- and FDI-related measures include:

- Lowering import traffic for 1690 items consisting of 1451 industrial, agricultural and 3 product health items.
- Deregulation package in real sector, such as elimination of soybean, wheat, flour, and onion trading system from Bulog with increasing import traffic.
- Eliminated foreign share-holding limit of 49% in firm other than financial firms in September 1997, and guaranteed existing foreign ownership in financial institutions.
- Eliminate prohibition for FDI in crude oil commodity.
- FDI is allowed to invest in production and trading sector operated until retail level.

Fiscal policy is to be more transparent and measures taken include:

- Reinforce the social safety net and extends subsidies to ensure the availability of food and other essential at affordable prices throughout country;
- Reforestation fund is to change according with budgetary fund.

Indonesia: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	139.1	158.0	175.7	197.7	222.5	126.0
Real GDP	7.2	7.3	7.5	8.1	8.0	4.6
Total Consumption	n/a	n/a	n/a	n/a	n/a	n/a
• Private Consumption	3.5	6.5	5.8	6.3	6.8	4.8
• Government Consumption	5.8	0.1	2.3	3.4	5.4	1.5
Total Investment	n/a	n/a	n/a	n/a	n/a	n/a
• Private Investment	5.2	6.9	16.1	14.1	12.4	4.3
• Government Investment	5.4	2.9	4.7	7.4	4.5	14.1
Exports	14.7	6.6	9.0	4.3	6.5	11.2
Imports	6.6	4.4	13.3	16.8	12.9	8.2
Fiscal and External Balances (% of GDP)						
Budget Balance [1]	-0.3	0.6	0.9	2.2	1.2	-3.7
Merchandise Trade Balance (f.o.b.)	4.8	5.4	4.6	2.8	1.5	4.4
Current Account Balance	-2.2	-1.5	-1.7	-3.4	-3.4	-2.7
Capital Account Balance	n/a	n/a	n/a	n/a	n/a	n/a
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	5.4	8.9	7.0	8.7	8.7	10.7
CPI	4.9	9.8	9.2	8.6	6.5	11.1
M2	20.2	22.0	20.2	27.6	26.3	23.2
Short-term Interest Rate [2] (%)	11.99	8.66	9.74	13.64	13.96	27.82
Exchange Rate (Rp/US$)	2,030	2,087	2,164	2,253	2,343	2,909
Unemployment Rate (%)	2.7	3.1	4.4	7.0	4.9	6.0
Population (millions)	186.0	189.1	192.2	195.3	200.0	205.0

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Budget balance is from IMF, International Financial Statistics. Fiscal data are for fiscal year starting Apr.1 of the calendar year specified; it is calculated as a share of nominal GDP is the calendar year referenced. (2) Short-term interest rate is the money market rate as given in IMF, International Financial Statistics, (September 1998).

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	-13.5	-15	-16.8	-3.0	-8.5	n/a	n/a	0	1.0	2.0
Real exports	n/a	n/a	-9.4	5.0	N/a	n/a	n/a	2.7	7.0	n/a
Real imports	n/a	n/a	-34.9	-5.0	N/a	n/a	n/a	6.2	2.0	n/a
CPI	95	60	n/a	20.0	35.0	n/a	n/a	n/a	15.0	10.0

Note: The official inflation projection is for the year to December 1998; others refer to annual averages. The IMF forecast is from the World Economic Outlook (IMF, October 1998); figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, September 1, 1998); figures for the period 1999-2001 refer to 1999 only. The ADB forecast is from the Asian Development Outlook 1998; the figures for the period 1999-2001 refer to 1999 only The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

JAPAN

The Japanese economy is in a prolonged slump, owing mostly to fragility in its financial sector and to spillover effects of the Asian financial crisis. Real GDP declined by 0.7 percent in fiscal year 1997 (April 1997 – March 1998) and is projected to shrink further in FY1998. The government has responded to the downturn of the economy by taking measures with respect to fiscal and monetary policy, the financial sector and other structural areas in order to revive the economy.

GDP

The Japanese economy lost its growth momentum after recording 3.2 percent growth in FY1996. Real GDP dropped sharply in the April-June quarter of 1997, a decline that was exacerbated by the shift in demand induced by the increase of the consumption tax from 3 percent to 5 percent in April of 1997. This caused a surge in household spending in the first quarter of 1997, ahead of the coming into effect of the tax measure in April, and a consequent drop in spending in the April-June quarter of 1997.[1] Following a rebound in the July-September quarter, economic activity faltered in the last two quarters of FY1997 as several factors combined to dampen sentiment in the business and household sectors, including the failure of some major financial institutions and the intensification of the Asian financial crisis. Real GDP declined by 0.4 percent in the October-December quarter (on a seasonally adjusted quarter-over-quarter basis), and by a further 1.3 percent in the January-March quarter. Consequently, in FY1997 as a whole, real GDP growth dropped to minus 0.7 percent.

These same factors continued to impact both on economic activity and on consumer and business confidence in the first half of FY1998. In the April-June quarter of 1998, real GDP recorded its third consecutive quarterly decline, shrinking by 0.8 percent from the preceding quarter. With these developments, the Economic Planning Agency of Japan revised its projections of real GDP growth in FY1998 downward to minus 1.8 percent. By comparison, the IMF now forecasts a decline of 2.5 percent in calendar year 1998, followed by a turnaround in calendar year 1999 to 0.5 percent growth.

The government has responded to emerging signs of economic weakness by implementing various policy measures as set out in the box below.

INFLATION

The rate of increase in the CPI sharply rose to 2.0 percent in FY1997 from 0.4 percent in FY 1996, mainly due to the increase in the consumption tax from 3 percent to 5 percent in April 1997. However, the inflation rate immediately stabilized in terms of month-to-month growth following the one-time rise in April. Excluding the effect of

[1] Accordingly, the shift transferred economic activity to FY1996 from FY1997, which deepened the extent of the slowdown in the latter period. In terms of average annual growth, which is not affected by these quarterly shifts in demand, real GDP slowed from 3.9 percent growth in calendar 1996 to 0.8 percent growth in 1997.

the tax increase, consumer prices in Japan remained stable in 1997 for the third consecutive year, reflecting the weakness of the level of overall economic activity and the effects of structural reforms. It is notable that Japan's consumer price stability has been achieved despite steep increases in import prices since mid-1995 when the yen's trend appreciation against the US dollar was reversed.

In FY1998, the pace of price increase has slowed again. In the April-June quarter of 1998, the CPI was only 0.4 percent above its year-earlier level and in the July-August period, CPI growth turned negative, with the price level falling by 0.2 percent from a year earlier. With continued sluggishness in economic activity in FY1998, the authorities now forecast the CPI to rise by a modest 0.1 percent in FY1998.

The rate of increase in the Wholesale Price Index was 1.0 percent in FY1997; it is expected to drop to minus 1.7 percent in FY1998.

EMPLOYMENT

The decline in employment has resulted in difficult labour market conditions, with the unemployment rate rising to a historical high of 4.3 percent in June 1998, which was matched again in August 1998. The prolonged economic slump has led not only to a decline in recruitment but also to job losses related to corporate restructuring and the increase in the number of bankruptcies. Employment grew by 0.7 percent in FY1997 and is projected to decline by 0.9 percent in FY1998. The unemployment rate is expected to rise to 4.2 percent in FY1998 from 3.5 percent in FY1997.

CURRENT ACCOUNT

The current account surplus (seasonally adjusted) increased steadily in recent quarters from 1.9 trillion yen in the first quarter of 1997 to 3.8 trillion yen in the second quarter of 1998. This upward trend reflects several factors, including the depreciation of the yen, the fall in oil prices, and weak domestic demand.

In FY1998, exports are expected to increase modestly by 2.6 percent, reflecting the contraction of demand in a number of Asian economies, while imports are projected to decline by 4.1 percent. Consequently the current account surplus is forecast to be 16.6 trillion yen in FY1998, following 12.9 trillion yen in FY1997.

EXCHANGE RATE

After reaching a historical peak in mid-1995, the Japanese yen depreciated, apart from a period of strengthening in mid-1997, until mid-1998. However, the yen firmed against the US dollar at the beginning of the fourth quarter, correcting its excessive weakness.

FOREIGN DIRECT INVESTMENT

FDI outflow from Japan increased for four successive years from FY1994 to FY1997. FDI outflow amounted to 6.6 trillion yen in FY1997, following 5.4 trillion yen in FY1996. FDI inflows to Japan declined slightly in FY1997 to 0.7 trillion yen.

FISCAL POLICY

To address the downturn in the economy, the government has expanded fiscal expenditures and implemented large tax cuts. In February 1998, a supplementary budget for FY1997 was approved that included 2 trillion yen (0.4 percent of GDP)) income tax cuts and commitments to front-loaded public works spending in early FY1998. In June of 1998, the first supplementary budget for FY1998 was approved to implement the economic stimulus package announced in April of 1998, which supports projects totaling over 16 trillion yen, including 4 trillion yen in tax cuts. In August, the government announced a plan for a second supplementary budget for FY1998, which will support projects totaling more than 10 trillion yen (2 percent of GDP), and will include more than 6 trillion yen (1.2 percent of GDP) in tax cuts.

Over the medium and long term, the Japanese government has committed to fiscal structural reforms to promote fiscal consolidation in response to the pressures of large fiscal deficits and to prepare for future fiscal demands arising from the economy's rapidly aging population. However, the weakness of current economic activity has necessitated an active role for fiscal policy to promote economic recovery and to realize sustainable growth. Under these circumstances, the Fiscal Structural Reform Law was modified to allow for an increase of the issue of special deficit-financing bonds under particular conditions and the postponement of the year of achieving the fiscal consolidation targets. Anticipating the passage of this modification, the comprehensive economic policy package launched in April 1998 has proposed tax cuts and the expansion of fiscal spending. A supplementary budget plan was adopted in June to implement these measures.

MONETARY POLICY

With the prolonged slump of the economy, short-term interest rates have remained around 0.5 percent since the Bank of Japan set its official discount rate at the historically low level of 0.5 percent in September 1995. Responding to the deterioration of economic activity, the Bank of Japan took a further step in September of 1998 by lowering its operating target for the overnight call rate to around 0.25 percent, from its recent average of about 0.45 percent, while leaving the official discount rate unchanged. Long-term interest rates have slipped further through 1997 and the first half of 1998, reflecting the weaker economic conditions. Money supply growth as measured by M2+CD grew faster in the first half of 1998.

MEDIUM-TERM OULOOK

The cabinet approved a medium-term economic plan in December 1995. In this plan, the projected real growth rate of Japan's economy from FY1996 to FY2000 was 3.0 percent on average, assuming the implementation of substantial structural reforms. However, in the three years that have passed since the plan was designed, it has become apparent that the Japanese economy has been growing slower than the plan's initial projection. The Economic Council, an advisory committee to the Prime Minister, published a report in June of 1998 with a revised medium-term economic outlook for the Japanese economy. Assuming the implementation of economic, fiscal and other structural reforms, the report estimates average annual economic growth rate from FY1998 to FY2003 to be around 2.5 percent. Based on this projection, unemployment is expected to drop from the current level of around 4 percent to less than 3.5 percent in FY2003. The current account surplus is projected to shrink to around 1.5 percent of GDP.

Japan’s Measures to Address the Regional Financial Crisis

Assistance to East Asian Economies

Since the onset of the Asian financial and economic crisis, Japan has pledged and steadily implemented its assistance measures amounting to US$ 43 billion based on the following five points of view:

- Prompt and effective financial assistance under the IMF-centered international assistance framework.
- Assistance for securing domestic liquidity and smooth access to trade finance in order to maintain and promote private sector activity.
- Support to the socially vulnerable segment of the population on which the recession and structural reforms have the heaviest impact.
- Implementation of a prudent industrial policy to consolidate the economic structure and to build competitive industries.
- Development of competent human resources which play a key role in overcoming the current economic turmoil.

Furthermore, Japan announced on October 3 “A New Initiative to Overcome the Asian Currency Crisis”.

Measures to revitalize the Japanese Economy:

Recognizing that the sound functioning of the Japanese financial system and the revitalization of the Japanese economy also contribute to the recovery of East Asian economies, Japan is striving to implement the following fiscal and financial policies:

- In November 1997, the government launched a structural policy package including measures such as deregulation, facilitation of land transactions and promotion of investment.
- In January 1998, the government announced a financial stabilization program, which made 30 trillion yen (6 percent of GDP) of public funds available to strengthen the financial position of the deposit insurance system and to inject capital into the banking system.
- In February 1998, a supplementary budget for FY1997 was approved, which included 2 trillion yen (0.4 percent of GDP) worth of income tax cuts and commitments to front-loaded public works in early FY1998.
- In April 1998, a “comprehensive economic measure” of over 16 trillion yen worth of projects, the biggest such package in Japanese history, was announced in an effort to achieve economic recovery. The package increased social infrastructure investment (8 trillion yen) and implemented additional temporary individual income tax reductions and individual inhabitant tax reductions (4 trillion yen) and tax reductions for special policy purposes.
- Permanent tax reductions, which in total substantially exceed 6 trillion yen, and the FY1998 supplementary budget of total projects worth over 10 trillion yen will be implemented.
- In order to settle the non-performing loan problems and to revitalize the Japanese financial system, a set of new legislation was passed by the Diet and new schemes were established to prepare for bank failures and to infuse public funds into banks with impaired capital.

Japan: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	3,725.5	4,292.8	4,700.3	5,144.1	4,591.2	4,187.6
Real GDP	1.0	0.3	0.6	1.5	3.9	0.8
Total Consumption	2.1	1.3	2.0	2.2	2.7	0.9
• Private Consumption	2.1	1.2	1.9	2.1	2.9	1.1
• Government Consumption	2.0	2.4	2.4	3.3	1.5	-0.1
Total Investment	-2.9	-2.4	-1.3	2.4	9.7	-3.5
• Private Investment	-7.5	-8.1	-3.4	3.3	10.7	-0.5
• Government Investment	15.1	15.5	3.9	0.2	7.2	-11.2
Exports	4.9	1.3	4.6	5.4	3.5	10.8
Imports	-0.7	-0.3	8.9	14.2	11.5	-0.2
Fiscal and External Balances (% of GDP)						
Budget Balance [1]	-3.3	-4.5	-5.7	-6.7	-6.6	-5.9
Merchandise Trade Balance (f.o.b.)	3.3	3.3	3.1	2.6	1.8	2.4
Current Account Balance	3.0	3.1	2.8	2.1	1.4	2.3
Capital Account Balance	-2.7	-2.5	-1.9	-1.3	-0.7	-2.9
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	1.7	0.6	0.2	-0.6	-0.5	0.6
CPI	1.6	1.3	0.7	-0.1	0.1	1.8
Money Supply (M2+CD)	0.6	1.1	2.1	3.2	3.3	3.1
Short-term Interest Rate [2] (%)	4.4	2.9	2.2	1.2	0.6	0.6
Exchange Rate (Yen/US$)	126.26	111.06	102.18	93.97	108.81	120.92
Unemployment Rate (%)	2.2	2.5	2.9	3.2	3.4	3.4
Population (millions)	124.5	124.7	125.2	125.5	125.8	126.02

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) The budget balance includes the social security accounts. (2) Short-term interest rate refers to 3-month certificates of deposit (CDs).

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	-1.8	-2.5	-1.2	n/a	-0.3	2.5	0.5	1.8	n/a	1.3
Real exports	-1.9	n/a	-11.2	n/a	3.9	n/a	n/a	2.8	n/a	6.6
Real imports	-7.7	n/a	-16.1	n/a	-1.5	n/a	n/a	6.4	n/a	2.7
CPI	0.1	0.4	0.3	n/a	0.5	0.2	-0.5	1.1	n/a	0.1

Note: The official forecast is from the EPA's October 6, 1998 statement and refers to fiscal years. IMF forecast is from the World Economic Outlook (IMF, September 1998); figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, September 1, 1998); figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, June 1998); figures for the period 1999-2001 refer to 1999 only.

REPUBLIC OF KOREA

Background: the economic and financial crisis

Korea is battling through its first genuine economic crisis following 3 decades of sustained growth that transformed it from a low-income agrarian economy to one of the larger industrial economies in world. With hindsight, the crisis reflected the confluence of a number of factors, in particular the development of structural vulnerabilities during the era of rapid expansion. The industrial structure, most notably the large corporate conglomerates, had come to be dependent on a narrow range of exports, which made the economy inflexible and exposed it to risk if there were shifts in external demand. The under-development of capital markets resulted in corporate finance being heavily dependent on bank loans, leading to high debt-equity ratios. At the same time, the lending financial institutions were exposed to large concentrated loans to individual borrowers. Due to the sheltered nature of the domestic financial markets, these problems were allowed to build over time. Finally, during the 1990s, with the exception of 1993, Korea consistently ran current account deficits. In the mid-1990s, these widened sharply, rising to US$ 23 billion or 4.9 percent of GDP in 1996.

The deficits had to be financed by foreign borrowing, which meant that large amounts of foreign debt were accumulating. As the public sector had run consistently large surpluses, the borrowing was being undertaken entirely by the private sector. Moreover, the build-up of foreign liabilities occurred during a period when Korea was in the process of liberalizing its capital account in line with OECD membership requirements, but again with hindsight, had not yet put in place the necessary supervisory oversight and governance mechanisms to ensure that associated risks were properly managed. Much of the debt that was taken on was short-term in maturity but the investments that were made with these funds were longer-term in nature. Moreover, the debt was for the most part unhedged. As it turned out, the resulting excessive unhedged exposure to foreign borrowing and the mis-match in maturities between assets and liabilities made the Korean economy vulnerable to external shocks.

Events were set in motion during 1996 when Korea experienced an economic slowdown that amounted to a "growth recession". This led to several bankruptcies, some of which included large corporate conglomerates, or *"chaebols"*, and raised concerns about possible domino-like bankruptcies in their medium-sized suppliers. The bankruptcies also added non-performing debt to the books of domestic financial institutions, weakening their balance sheets. At the same time, some foreign creditors were already starting to withdraw from the Korean market and were unwilling to rollover short-term loans. This reflected rising concerns about the large current account deficit in the context of the global export slowdown of 1996. These concerns were prompted by questions about the economy's ability to restore competitiveness given the close (and indeed often illegal) ties between government and industry that were undermining domestic competition and efficiency. Meanwhile the more-or-less steady decline of the equity market in Korea from its 1994 peak was making it increasingly difficult to raise project funds in the domestic capital market.

The focus of international financial markets turned to Korea in early November 1997 following the mid-October runs on Chinese Taipei and Hong Kong, China. There were several immediate triggers for the financial market run that started in full force at the end of the first week in November. These included the announcement that two more *chaebols* were in financial difficulty, the slowness of the government to react in the lead-up to the Presidential elections of December 1997 (in particular the stalling of financial reform legislation in parliament), and the weakening of the yen/dollar exchange rate, which had important implications for Korea's competitiveness given the extent to which its exports compete with Japan's in third markets. On November 17, facing severe selling pressure, the Bank of Korea abandoned its defense of the currency at the 1,000 won/US$ level. The ensuing depreciation gained momentum, drying up liquidity in the economy.

After several days of intense discussions with the Korean government, the IMF-led group agreed to make available emergency loans at remarkable speed and in tremendous volume. As part of the agreement, the IMF required Korea to tighten both its fiscal and monetary policies and to carry out major structural reforms. These reforms and progress on their implementation are detailed in the Policy Box below.

Considerable progress has since been made in stabilizing the economy. The external value of the won has recovered from its lows in the first quarter of 1998 to trade consistently in the 1300 to 1400 range against the US dollar.

The accelerated disbursement of financial aid from the IMF, the World Bank and the Asian Development Bank has greatly eased the short-term liquidity shortage. Out of a total package of US$ 58.35 billion, US$ 26 billion had been disbursed by September 1998. Equally significant was the conversion of domestic banks' short-term external debt of US$ 21.8 billion into long-term government-guaranteed loans. Also the Korean government successfully launched its inaugural global bond offering totaling US$ 4 billion. Reflecting improved investor confidence, international creditor banks increased their rollovers of maturing loans from 32.2 percent in December 1997 to as high as 100 percent in June 1998. By the end of September, these various developments supported the expansion of usable foreign reserves to US$ 43.3 billion, well above the level preceding the financial crisis and up from a low of US$ 8.9 billion at the end of 1997.

Export volumes have increased substantially. Coupled with import compression, this has swung the current account into a very large surplus, facilitating the continuing adjustments on the capital account. Moreover, inflation has been well contained, despite the lower exchange rate, allowing interest rates to come down.

However, the Korean economy is still in a situation where it cannot exclude the possibility of remaining in prolonged recession, if the problems associated with corporate and financial sectors' restructuring and the tight monetary situation continue. Moreover, the cost has been significant in terms of unemployment, which rose to 8.1 percent in August 1998, and the government has taken steps to improve the social safety net.

Korea's Structural Reform Measures

Pursuant to the agreements struck with the IMF, Korea has launched major reforms, unprecedented in Korean history, to address the structural imbalances exposed by the crisis. Measures already implemented or planned include the following:

- Various steps have been taken to restore health to the Korean financial system through major reform legislation:
  - Financial Supervisory Commission (FSC): pursuant to legislation passed in December 1997, the FSC formally began operation on April 1st, with a mandate to consolidate the Banking Supervisory Authority, Securities Supervisory Board, Insurance Supervisory Board, & Non-bank Supervisory Authority; and to monitor and regulate all financial entities in Korea. The FSC will review bank restructuring/re-capitalization plans, enforce Bank for International Settlements (BIS). standards and make recommendations to the Minister of Finance & Economy on the fate of banks that do not meet standards (for example, license revocation).
  - Korea Asset Management Corporation: this fund was set up to address the problem of non-performing loans. It has spent 17.7 trillion won (US$ 13.1 billion[1]) to purchase non-performing loans worth 39 trillion (US$ 30.0 billion) at face value, in order to accelerate the process of recapitalizing troubled banks.
  - Capital adequacy requirements: all banks are now required to meet the international capital adequacy ratio established by the BIS. Of the 12 Korean banks that currently do not meet these standards, five were ordered on June 29, 1998 to shut down and to merge with other banks; the remaining seven were given conditional approval for continued operation, based on comprehensive management reforms, suspension of international business dealings and consolidation of operations. The license of a 13th merchant bank was suspended and its ownership transferred while the business of 3 other merchant banks has been halted. Korea First Bank and Seoul Bank were recapitalized to avoid any systemic risk that might have accompanied their failure and plans call for their being auctioned in advanced of the November 15, 1998 date set out in the agreement with the IMF.
  - Foreign bank entry: provision has been made to allow foreign banks to establish Korean affiliates, provided they: (i) show minimum assets of won 100 billion in the case of commercial banks and won 25 billion for provincial banks; (ii) meet the BIS capital requirements; (iii) have no record of business suspension in past 3 years, and (iv) are qualified to act as majority shareholder of the affiliate.
  - Deposit insurance: the deposit insurance system is being overhauled and strengthened to enhance depositor confidence in the financial system.
  - The independence and authority of the Bank of Korea was guaranteed.
- Foreign ownership: on May 25, 1998, the ceiling on foreign equity ownership of domestic companies was completely eliminated and hostile mergers and acquisitions was fully liberalized, including by foreign companies.
- Labour market reforms: the Labor Standards Act was amended to allow layoffs for

[1] At the exchange rate of 1,347 prevailing as of October 13, 1998.

the purpose of restructuring; this makes it easier for an investor to acquire a Korean company and to increase its profitability. At the same time, job placement services are being strengthened or privatized to promote more efficient manpower allocation across industries. In addition to the new Labor Standard Act, legislation allowing the establishment of manpower-leasing businesses was put into effect in July. This important measure will further help to enhance labor market flexibility by making labor outsourcing an additional option for employment adjustment.

- Corporate sector reform: a number of measures have been adopted to restructure the industrial sector:
  - The *chaebols* have been required to eliminate their existing cross-debt guarantees by 2000 and prohibited from issuing new guarantees since April 1998.
  - To improve transparency and accountability, corporations are required to produce consolidated financial statements in line with international standards by 1999, far in advance of the original schedule.
  - Voting rights of minority shareholders have been strengthened as the representation requirement for class action suits was reduced from 1 percent to 0.01 percent.
  - Bankruptcy-related laws were streamlined in February 1998 in order to facilitate the exit of non-viable corporations.
  - For their part, the *chaebols* have pledged to implement restructuring measures, including steps to (i) enhance transparency; (ii) eliminate cross debt guarantees; (iii) improve their capital structure; (iv) focus on core business as and cooperation with small business; and (v) increase accountability of major shareholders and managers.
  - As well, the five largest *chaebols* have agreed to accelerate moves to swap business to help revive the economy.

GDP

Following a slowdown in real GDP growth in 1997 to 5.5 percent from 7.1 percent a year earlier, the Korean economy slumped in the first half of 1998. On a seasonally adjusted quarter-over-quarter basis, real GDP fell by 5.8 percent in the first quarter of 1998 from the fourth quarter of 1997. This was followed by a further but shallower decline of 1 percent in the second quarter. As a result, the level of real GDP in the first quarter was 3.9 percent below its year-earlier level in the first quarter and 6.6 percent below its year-earlier level in the second. This marked the worst performance since the 7.8 percent decline registered in the fourth quarter of 1980.

The downturn in Korea's economy is reflected in the decline of industrial production in the first and second quarters of 1998 by 7.6 percent and 11.7 percent year-over-year, respectively, while capacity utilization in the manufacturing fell to 67 percent in the first half of 1998 from 80.9 percent on average during 1995 to 1997.

For 1998 as a whole, **real GDP** is expected to record a decline of about 5 to 6 percent. **Domestic demand** is expected to decrease about 15 percent. The sharpest decline in activity will be in respect of **facility investment** which is expected to drop by about 40 percent as a result of the debt repayment pressure and the sharp increase in excess capacity with the slump in final domestic demand. **Construction investment** is expected to decrease by about 16 percent due to decreasing land prices, decreasing demand for new house, *etc*. **Private consumption** is on track to decline by approximately 11 percent due to rising joblessness and decreasing wage levels as well as depreciation of asset prices. **Government consumption** is also expected to decrease dramatically as a result of decrease in government's ordinary budget. The swing from a large negative to a large surplus on the current account will offset to a large extent the weakness in domestic demand.

INFLATION

Inflation is slowing after rising sharply on the heels of the *won*'s steep devaluation. For the first nine months of 1998, **consumer prices** rose 8.0 percent from a year earlier. However, the pace of growth on a year-over-year basis slowed from a high of 9.0 percent in March to only 6.9 percent in September. The stabilization of the won and the decline in international oil prices have been important factors. As well, the reduced level of domestic demand is acting to restrain price growth.

For 1998 overall, consumer prices are expected to rise by 7 to 8 percent, driven largely by import price increases induced by the depreciation of won. Producer prices are expected to increase on the order of 12.6 percent due to the high import content of many goods manufactured in Korea.

EMPLOYMENT

The unemployment rate increased 0.6 percent to 7.6 percent in July as the total number of unemployed surpassed 1.65 million. This was an increase of 1,175,000 over a year before. If temporary or part-time workers with no steady jobs are added, the total jobless figure approaches two million.

Largely responsible for the increase was decreased employment due to restructuring by firms in the manufacturing and construction sectors.

CURRENT ACCOUNT

The **current account** has posted consecutive surpluses since November 1997, resulting in a cumulative surplus of US$ 21.26 billion in the first six months of 1998. Korea is well on target to meet the annual surplus target of US$ 23 billion set jointly by the government and the IMF.

Exports continually grew in the first four months of this year, but fell in May. However, imports continued to dramatically decrease and the trade surplus soared to US$ 19.57 billion in the first half of this year. Exports (f.o.b.) through June totaled US$

67.12 billion, up 2.9 percent over the year-earlier period, while imports nose-dived 36.1 percent to US$ 47.54 billion.

EXCHANGE RATE

The won/dollar **exchange rate**, which approached 2000 at one point in December 1998 year, has stabilized, trading in the 1300-1400 range since the second quarter of 1998. However, the foreign exchange markets remain more volatile than normal reacting both to economic developments within Korea and abroad.

For 1998 as a whole, reflecting its low value in the first quarter and the subsequent stabilization, the won/dollar exchange rate is likely to average approximately 1,400 to the US dollar. The swing of the current account into surplus and the improved situation in respect of external refinancing augur well for consolidating the stabilization gains.

FOREIGN DIRECT INVESTMENT

Foreign direct investment has improved rapidly after bottoming out in January. Foreign investment in June reached US$ 662 million, up 24.9 percent from the same month last year. For the first half of 1998, the total amount of foreign investment reached US$ 2.46 billion.

In the first half of 1998, 28.4 percent of total FDI was related to M&A activity, up from 10 percent recorded in the same period last year. The manufacturing sector received the greatest amount of such investment, totaling US$ 1.485 billion in the first half of 1998.

FISCAL POLICY

Financial sector restructuring and rising unemployment made running a fiscal deficit unavoidable. In order to boost the domestic economy, prop up domestic consumption and lower interest rates, Korea and the IMF agreed to keep this year's fiscal deficit at 0.8 percent of GDP in February. This was then adjusted upward to 4 percent in a July meeting in response to the soaring jobless rate.

Korea plans to run further expanded deficits to boost growth through programs such as supplying housing loans, boosting consumption of durable goods and providing various tax incentives aimed at supporting domestic industries.

MEDIUM-TERM OUTLOOK

It is acknowledged that there are many uncertainties in the medium-term outlook for Korea, including the speed of structural adjustment and developments in external factors. If the current structural reform efforts are implemented on a speedy and consistent manner, the Korean economy is forecasted to bottom out in 1999 and to resume growth in 2000 and beyond at a rate of about 5 percent. The unemployment rate is expected to stabilize in the near term and to start to decline slowly after the year 2000. Inflation is expected to stabilize in the 3 to 4 percent range after the sharp increase in 1998 as a result of the deep depreciation of won.

With the stabilization of the exchange rate and resumption of stable economic growth, Korea expects to record per capita income of U$ 10,000 around the year 2001 or 2002. As well, with the stabilization of the currency and expanding domestic demand, the current account surplus will decrease on a gradual basis. The total foreign debt worth U$ 45 billion is expected to be settled after the year 2000.

Korea: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP(billion US$)	307.9	332.8	380.7	456.5	484.6	442.6
Real GDP	5.1	5.8	8.6	8.9	7.1	5.5
Total Consumption	6.8	5.3	7.0	7.2	6.9	3.5
• Private Consumption	6.6	5.7	7.6	8.3	6.8	3.1
• Government Consumption	7.6	3.0	4.2	1.0	7.8	5.7
Total Investment	0.8	5.2	11.8	11.7	7.1	-3.5
• Private Investment	-2.5	6.2	12.3	n/a	n/a	n/a
• Government Investment	11.0	-0.6	8.2	n/a	n/a	n/a
Exports of Goods	11.0	11.3	16.5	24.1	14.1	5.0
Imports of Goods	5.1	6.7	21.7	22.1	14.8	-3.8
Fiscal and External Balances (% of GDP)						
Budget Balance [1]	-0.7	0.3	0.5	0.4	-0.3	0.03
Merchandise Trade Balance (f.o.b.)	-0.7	0.6	-0.8	-1.0	-3.2	-0.5
Current Account Balance	-1.5	0.1	-1.2	-1.9	-4.9	-1.9
Capital Account Balance	n/a	n/a	n/a	n/a	n/a	n/a
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	6.1	5.1	5.5	5.6	3.4	4.5
CPI	6.2	4.8	6.2	4.5	4.9	4.4
M2	18.4	18.6	15.6	15.5	16.2	19.3
Short-term Interest Rate [2] (%)	16.41	12.96	13.29	14.05	12.63	13.17
Exchange Rate (Won/US$)	788.4	808.1	788.7	774.7	844.2	949.9
Unemployment Rate (%)	2.4	2.8	2.4	2.0	2.0	2.6
Population (millions)	43.7	44.2	44.6	45.1	45.6	46.2

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Budget balance refers to integrated fiscal balance. (2) Short-term interest rate is the call rate.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	-5.0	-7.0	-6.2*	-1.0	-0.2	2.0	-1.0	3.4*	3.1	4.0
Real exports	-2.5	n/a	0.8	5.8	12.0	1.0	n/a	4.7	5.6	10.0
Real imports	-30	n/a	-28.0	-12.3	-6.0	16.0	n/a	11.8	14.0	3.0
CPI	8.0	8.5	n/a	9.8	10.5	5.0	4.3	n/a	7.2	6.6

Note: * real GNP
Source: The official forecast is from the Ministry of Finance and Economy. IMF forecast is from the World Economic Outlook (IMF, September 1998); figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, September 1, 1998); figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

MALAYSIA

GDP

Real GDP expanded by 7.7 percent in 1997 compared with 8.6 percent in 1996. The moderation in growth reflected both the dampening effect of the currency crisis on domestic demand in the second half of the year as well as the effect of the adjustment measures taken to achieve more sustainable growth in the medium term.

In line with the more moderate pace of growth, nominal **Gross National Product** (GNP) expanded by 10.6 percent compared with 14.3 percent in 1996. Nominal per capita income rose to RM 12,142, equivalent to US$ 4,316, from RM 11,239 in 1996.

From a sectoral perspective, growth of the construction sector slowed significantly to 10.6 percent (1996: 14.2 percent) which in turn affected growth in the production and sales of construction materials and resulted in a cutback in the use of services related to the sector. Growth in services moderated to 7.9 percent (1996: 9.7 percent) as economic activity slowed and fears about retrenchment made attitudes towards spending more cautious. Performance of the manufacturing sector remained strong with growth of 12.5 percent in 1997 (1996: 12.2 percent), spurred by a weaker *ringgit* that boosted export-oriented industries.

The financial crisis exerted a deflationary impact on the economy, leading to slower growth in total aggregate demand during the second half of the year. Real private consumption expenditure growth slowed to 4.7 percent (1996: 6.0 percent). Public sector expenditure growth picked up on the other hand to 4.8 percent (1996: 1.6 percent) mainly due to higher outlays on supplies and services to ensure the smooth running of the government machinery and to provide improved public services and amenities. Private sector investment growth slowed to 8.3 percent (1996: 13.4 percent) but public sector investment grew more rapidly, climbing 9.2 percent (1996: 1.1 percent) due to higher capital expenditure by non-financial public enterprises (NFPEs).

With regard to developments on the external side, growth in **merchandise trade** accelerated sharply with merchandise exports expanding by 10.8 percent (up from 7.2 percent growth in 1996) and merchandise imports by 10.2 percent (up from 4.2 percent growth in 1996). The strong performance of the export sector reflected the 16 percent increase in exports of electrical and electronic products, which was Malaysia's largest export sector in 1997, with earnings amounting to RM 112.3 billion or 50.7 percent of total export earnings in 1997. Imports of intermediate goods, which accounted for 65.6 percent of total imports in 1997, increased by 10.4 percent to RM 145 billion, while imports of capital goods and consumption goods increased by 19.2 percent and 11.2 percent respectively.

INFLATION

Inflation, as measured by the increase in the Consumer Price Index, remained low at 2.7 percent in 1997 against 3.5 percent in 1996. The decline in inflation was helped by the slower pace of food price increases (5 percent in 1997 compared with 5.9 percent in 1996).

EMPLOYMENT

With moderation in economic growth in 1997, employment opportunities expanded at a slower rate of 2.6 percent compared with 2.8 percent in 1996. Nonetheless, the labour market remained tight. This continuing tight labour market situation has exerted pressure on wages and also resulted in competition amongst industries for skilled and semi-skilled workers. Given the large number of unfilled vacancies, especially in manufacturing and the plantation sector, new entrants into the labour force as well as those laid off due to problems associated with the financial crisis were easily absorbed by the labour market. Consequently, the unemployment rate for 1997 continued to remain low at 2.7 percent in 1997 (1996: 2.5 percent).

CURRENT ACCOUNT

The current account deficit of the balance of payments remained at 5.1 percent of GNP in 1997 although in absolute value, the deficit increased slightly to RM 13.4 billion (1996: RM 12.3 billion).

The **merchandise trade account** registered a larger surplus of RM 11.1 billion compared with a surplus of RM 10.2 billion in 1996. The larger merchandise trade surplus was attributed to the acceleration in the growth of merchandise exports of 13.3 percent (1996: 7.6 percent).

However, the **services** deficit widened slightly to RM 20.8 billion (1996: RM 19.5 billion). This was mainly attributed to the higher outflow of investment income of RM 13.5 billion (1996: -RM 11.7 billion), particularly due to the higher interest payments as a result of the depreciation of the *ringgit*.

In the first half of 1998, due to the combination of sharply expanded exports in reflection of the increased competitiveness of Malaysian industry with the lower *ringgit*, and import contraction due to the sharp decline in domestic demand, the merchandise trade surplus expanded sharply.

EXCHANGE RATE

The *ringgit* recorded a cross-the-board depreciation against all major currencies over the course of 1997 as compared with the end-1996 position.

The first signs of the crisis for Malaysia emerged in mid-May 1997 when the *ringgit* came under pressure, triggered by developments in Thailand. The *ringgit,* however, recovered to an intra-day high of US$1=RM 2.4795 on 16 May and thereafter stabilized within the range of US$1=RM 2.49-2.53 up to end-June. In the first half of 1997, the *ringgit* averaged 2.497 vis-à-vis the US dollar, somewhat stronger than its year-end 1996 closing value of 2.529.

In the second half of 1997, the global strengthening of the US dollar and pound sterling and the escalation of the regional financial crisis set the stage for the depreciation of the *ringgit* to unprecedented levels. The depreciation was concentrated in the last four months of 1997 when adverse market reaction to a series of events pushed the *ringgit* to a year-end close of US$1=RM 3.892, a depreciation of 35 percent from its year-end 1996 value.

When markets reopened in 1998, the *ringgit* declined steeply along with other Asian currencies against the US dollar during the first week of trading to reach its low point of US$1=RM 4.88 on 7 January 1998. The general rebound throughout Asia from the early-January overshoot brought the *ringgit* back up to a January close of US$1=RM 4.5674 and subsequently to the 3.8 to 3.9 range for the balance of the first half of 1998.

The renewal of pressures in the third quarter as the extent of the regional downturn was becoming clear and as the turbulence was showing signs of spreading led to a decline in the *ringgit* below the level of US$1=RM 4. The government then fixed its value at US$1=RM 3.8, effective 2 September 1998. At the same time, trading in Malaysian shares and currency outside of Malaysia was halted and selective capital controls were put in place.

FOREIGN DIRECT INVESTMENT

Net inflow of inward investment continued to remain strong in 1997 at RM 19.2 billion (1996: RM 19.4 billion). As in 1996, the bulk of the inflows of foreign direct investment was primarily channeled to the manufacturing (83 percent) and oil and gas (7 percent) sectors. Net inflows of equity investment in the manufacturing sector remained strong because of exceptionally large approvals of manufacturing projects in the 1994-96 period.

FISCAL POLICY

The Federal Government's fiscal position remained strong in 1997 with the overall budget in surplus for the fifth consecutive year, dating back to 1993. This record is attributed to fiscal discipline and tight controls on expenditure coupled with favourable revenue performance. The overall **budget surplus** was 0.8 percent of GNP in 1997 compared with 0.9 percent of GNP in 1996.

Federal revenues increased by 12.8 percent in 1997 (1996: 14.4 percent) while federal expenditures increased by a modest 4.7 percent in 1997, as budgetary policy during the year continued to be focussed on consolidation. Within the expenditure categories, gross development expenditure rose moderately by 7.7 percent to RM 15.8 billion, largely reflecting spending on human resources development, improvement of infrastructure facilities as well as rural development. Operating expenditure, on the other hand, increased at a slower rate of 1.8 percent (1996: 19.9 percent), reflecting continued stringent controls on expenditure to avoid wastage and to curtail less essential spending.

MONETARY POLICY

The annual growth of M1 and M3 slowed down substantially during the second half of 1997 and ended the year significantly lower at 4.6 percent and 18.5 percent respectively compared with 16.7 percent and 21.7 percent respectively at the end of 1996. Meanwhile M2 growth remained high at 22.7 percent (19.8 percent at end-1996) reflecting the shift in deposits from finance companies to commercial banks. In absolute terms, M3 increased by RM 61 billion (1996: RM 57.8 billion). The slower annual growth of M3 reflected mainly the priority of the Central Bank in ensuring that, despite a slowdown in growth, inflationary pressures arising from the depreciation of the *ringgit* be contained.

The movements of interest rates reflected the developments on the exchange markets and to a lesser extent on the money supply. The further tightening of monetary policy in 1997 reinforced the upward trend in interest rates that began in 1995. In the first four months of 1997, interbank rates remained firm in the range of 7.22 percent to 7.55 percent, as the tight stance of monetary policy was maintained to contain inflationary pressure arising from the strong credit growth. In mid-May, as pressures on the ringgit developed, the 3-month interbank rates rose sharply to peak at 8.62 percent. Interbank rates subsequently drifted downwards and remained relatively unchanged in June, as the pressure on the *ringgit* subsided and liquidity improved. However, a second round of speculative activity on the *ringgit* occurred in July that caused an even sharper increase in the interbank rates. Interbank rates, however, were adjusted upwards progressively from mid-September at 7.55 percent to 8.3 percent at end-October, 8.5 percent at end-November, and eventually to 8.7 percent at end-December, the highest level recorded since 1986.

MEDIUM-TERM OUTLOOK

The impact of the financial crisis in the region began to take significant effect on the level of domestic economic activity in 1998. This will result in an economic contraction in 1998 and some increase in unemployment. Inflationary pressure is expected from higher import costs due to the depreciation of the *ringgit.* The government has introduced adjustment measures that it deems appropriate to maintain financial stability and business confidence as well as to minimize the impact of the crisis on the economy and support an early recovery and sustainable growth over the medium term.

GDP: in the first half of 1998, real GDP contracted at the rate of 4.8 percent. For the whole of 1998, real GDP is expected to record negative growth of -4.8 percent, reflecting contraction in all sectors except for services. This projection is premised on prospective developments in the regional and international environment, as well as in the domestic economy. The adjustment measures introduced in December 1997, March and July 1998 coupled with emerging signs of restoration of regional financial stability have had a positive effect in restoring investor confidence. However, a number of risks remain. They include the possibility of sharper-than-expected moderation in world output and trade, a more prolonged regional crisis and increased uncertainty in the performance of capital flows, more intense competition, slower growth in regional trade, and an uncertain outlook for exports of electronic and electrical goods.

Inflation: Malaysia has enjoyed relatively low inflation rates during this past decade of high growth. In the first half of 1998, the CPI was up 5.0 percent on a year-over-year, and moved moderately higher to an average year-over-year rate of 5.7 percent in July and August. For the whole of 1998, it is expected that the pass-through effects of the depreciation of the *ringgit* on domestic prices will increase progressively, but the inflation rate is expected to be contained at 5.2 percent.

Employment: in line with the moderation in domestic economic activity, a weaker employment situation is likely to emerge in 1998. It is envisaged that retrenchments could arise particularly in the construction-related industries, manufacturing and services sector as companies undertake restructuring exercises to reduce costs. The regional financial crisis is likely to lead to a softening of the domestic labour market. The unemployment rate is expected to increase marginally to 4.9 percent in 1998.

International payments: the current account of the balance of payments is expected to improve significantly in 1998, due to the large surplus in the merchandise account and a reduced services account deficit. The expected improvement in the current account reflects both the positive impact of a weaker *ringgit* on the export sector as well as the contraction in import volume arising from the postponement of non-critical projects with high import content.

Malaysia's Response to the Regional Financial Crisis

The government has undertaken adjustment policies and implemented financial reforms to reduce the risks and vulnerabilities to external developments. These include:

- Monetary policy has been adjusted as necessary to reflect developments.
  - In the initial period, there was a pronounced tightening of monetary policy to respond to rising inflationary pressures following the depreciation of ringgit.
  - Monetary policy response was subsequently directed to restoring stability and to overcoming the disruptions to economic activity caused by uncertainties in the foreign exchange and stock markets.
  - Monetary policy has also focused on addressing the tight liquidity situation and inefficiencies in the financial intermediation process that had emerged in the banking system.
- The government remains committed to maintaining fiscal discipline while strengthening the social safety nets to protect lower income groups, and implementing counter-cyclical measures, including fiscal stimulus, to support economic recovery and to contain the contractionary impact of the financial crisis, due to the limited capacity of the private sector. In the 1999 Budget, the government has changed its fiscal stance from a surplus to a deficit budget, with an overall deficit of 3.7 percent of Gross National Product (GNP) compared with the surpluses registered for the past five consecutive years since 1993.
- The government remains committed to the liberalization of investment restrictions in order to deepen competition and to accelerate the revival of capital flow. The policy will aim to:
  - introduce more competition in key domestic trading activities (particularly for products subject to price controls); and
  - reduce investment restrictions (domestic and foreign) in the financial sector as well as in other key sectors.
- The exchange rate for the *ringgit* has been quoted at RM 3.80 against the US dollar for foreign currency transactions effective 2 September 1998. Measures adopted during this period were aimed at:
  - Limiting the contagion effects of external developments on the Malaysian economy.
  - Preserving the recent gains made in terms of the policy measures to stabilize the domestic economy.
  - Ensuring stability in domestic prices and the *ringgit* exchange rate and creating an environment that is conducive for a revival in investor and consumer confidence and facilitating economic recovery.
- Promote good corporate governance:
  - Enhanced disclosure of corporate information.
  - Closer scrutiny for corporate governance.
  - Enhanced standards of corporate governance to boost investor confidence.

Malaysia: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	56.89	61.19	74.33	86.10	98.74	71.39
Real GDP	7.8	8.3	9.2	9.5	8.6	7.7
Total Consumption	3.2	6.0	9.8	8.9	4.9	4.8
• Private Consumption	3.0	4.6	9.8	9.4	6.0	4.7
• Government Consumption	4.0	10.7	9.9	7.3	1.4	4.8
Total Investment	10.0	14.8	17.1	19.9	9.8	8.5
• Private Investment	0.5	19.1	27.9	25.3	13.4	8.3
• Government Investment	28.0	8.5	-0.6	8.7	1.1	9.2
Exports	6.2	17.2	22.5	19.6	7.2	10.8
Imports	1.2	19.1	27.7	21.4	4.2	10.2
Fiscal and External Balances (% of GDP)						
Budget Balance	-0.8	0.2	2.3	0.9	0.8	2.5
Merchandise Trade Balance (f.o.b.)	5.8	5.0	2.4	0.04	4.0	4.0
Current Account Balance	-3.8	-4.8	-6.3	-10.0	-4.9	-4.8
Capital Account Balance	6.9	8.4	6.1	7.6	5.4	6.8
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	4.1	2.7	5.4	5.0	5.2	2.9
CPI	4.7	3.6	3.7	3.4	3.5	2.7
M2+CD	19.1	22.1	14.7	24.0	19.8	22.7
Short-term Interest Rate (%)	8.04	6.50	5.45	6.76	7.39	8.7
Exchange Rate (Ringgit/US$)	2.61	2.70	2.56	2.54	2.53	3.88
Unemployment Rate (%)	3.7	3.0	2.9	2.8	2.5	2.7
Population (millions)	18.6	19.0	19.5	20.7	21.2	21.7

Source: Data are as submitted by member economies, unless otherwise specified.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	-4.8	-6.4	-2.3	3.5	1.4	n/a	n/a	3.5	4.5	3.5
Real Exports	2.0	n/a	-14.8	8.0	n/a	n/a	n/a	8.7	10.0	n/a
Real Imports	-10.7	n/a	-18.5	6.0	n/a	n/a	n/a	9.1	7.0	n/a
CPI	5.2	6.0	n/a	5.0	7.5	n/a	n/a	n/a	4.5	3.8

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998). The LINK forecast is from the World Outlook (Project LINK, September 1,1998), figures for the period 1999-2001 refer to 1999 only. The ADB forecast is from the Asian Development Outlook 1998, figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

MEXICO (UNITED MEXICAN STATES)

In 1997, Mexico consolidated the economic recovery that began during the third quarter of 1995, with economic performance exceeding every expectation. The structural reforms and improvements in economic fundamentals initiated as part of the recovery program have been important factors in 1998 in helping the Mexican economy to deal with the international financial market turbulence that has affected emerging market economies throughout the world and other adverse external developments such as the decline in oil prices. Mexico has maintained strong growth, contained inflation and sustained employment levels.

GDP

In 1997, the **real GDP** growth rate was 7.0 percent, the highest real increase in the last 16 years, and significantly above the original projection of 4.0 percent. Of particular note is that economic growth was financed mainly through domestic savings, which reached 21.2 percent of GDP. Growth was more balanced than in 1996, with **domestic demand** as the main engine of economic activity. Investment grew by 20.9 percent, private consumption by 6.3 percent and public consumption by 1.8 percent.

In terms of **sectoral performance**, agricultural production grew by 1.4 percent, services by 6.8 percent, and industry grew by about 9.3 percent, including average annual growth in mining of 4.3 percent, manufacturing (9.8 percent), construction (10.2 percent) and electricity and gas sectors (5.8 percent), respectively.

In the first half of 1998, the Mexican economy expanded at an annual pace of 5.5 percent. Real GDP was up by a robust 6.6 percent year-over-year growth in the first quarter, slowing to a 4.3 percent pace in the second quarter. This performance is consistent with the medium-term growth target of about 5 percent per annum.

INFLATION

In terms of the inflation targets established by government for CPI inflation (December over December), the CPI fell to 15.7 percent in December 1997, close to the original target of 15.0 percent, and 12 percentage points lower than the corresponding 1996 rate. This sharp reduction in inflation is one of the main accomplishments of Mexico’s economic policy. Moderate wage demands and the relative stability of the exchange rate during 1997 also contributed to the significant CPI reduction.

Accumulated inflation in the first nine months of 1998 amounted to 12.16 percent, marginally above the full-year target of 12.0 percent. The higher than expected inflation reflects primarily the pass-through of higher import prices due to the depreciation of the peso and to a lesser extent higher wages and unforeseen price increases in basic goods.

The average level of the CPI through the first three quarters was approximately 15 percent over the corresponding period in 1997. Accordingly, prospects are good for a further deceleration from the 20.6 percent average annual CPI growth recorded in 1997, and the 34.4 percent inflation in 1996.

EMPLOYMENT

Due to favourable economic growth performance, mainly in manufacturing and construction, the open **unemployment rate** showed a sharp decline from 4.1 percent in December of 1996, to 2.8 percent in December of 1997, far below the original projection of 3.9 percent. More than 670,000 new jobs were created in the formal sector of the economy, according to the increase in the number of permanent workers affiliated with the Mexican Social Security Institute.

During the first seven months of 1998, the open unemployment rate averaged 3.3 percent, somewhat higher than the December 1997 figure, but below the 4.1 percent registered in the corresponding period in 1997. With the continuation of stable economic recovery and the establishment of training programs for lower-skilled workers, the government anticipates the rate will continue to gradually decline.

CURRENT ACCOUNT

After two years of moderate deficits, the **current account** deficit rose to US$7.3 billion in 1997, much more than the projected figure of US$4.3 billion. However, due to the better-than-expected economic performance, this deficit represented only 1.8 percent of GDP, only 0.6 percentage points greater than the original forecast. The deficit resulted from the combination of a merchandise trade surplus of 0.6 billion, a non-factor services deficit of 0.3 billion, a factor services deficit of 12.9 billion, and a surplus on net transfers in the amount of 5.2 billion. The deficit was financed by high levels of foreign investment.

During 1997, the surplus on **merchandise trade** showed a sharp decline from US$6.5 billion to US$0.6 billion. **Exports** totaled US$110.4 billion (up 15.0 percent from 1996) and imports amounted to US$109.8 billion (up 22.7 percent from 1996). Due to falling oil prices, oil exports dropped by 2.3 percent; however, non-oil exports grew by 17.5 percent, led by manufacturing, where exports increased 18.1 percent. Regarding **imports**, high economic growth induced large inflows of capital goods (up 38.9 percent over 1996) as well as of intermediate goods (up 18.7 percent over 1996) and also of consumer goods (up 40.1 percent over the preceding year).

Through the first 8 months of 1998, Mexico's exports were up 8 percent over the corresponding year-earlier period while imports were up 17.5 percent. A steep decline in oil exports (which were down 42.5 percent in August compared to a year earlier) is an important factor in the comparatively lower export growth. The current account deficit is now projected by the IMF to reach 3.4 percent of GDP in 1998.

EXCHANGE RATE

Mexico has maintained the market-determined exchange-rate regime that was adopted shortly after the 1994-1995 crisis began. During the first 3 quarters of 1997, the Mexican *peso* showed considerable stability, with the main reason being significant capital inflows. However, the *peso* weakened during the fourth quarter, especially in October, when the effects of the Asian financial turmoil began to be felt in Latin America. For the year, the peso depreciated marginally in nominal terms vis-à-vis the US dollar but appreciated quite significantly in real terms. On an annual average basis, the nominal **exchange rate** depreciated by 4.0 percent against the dollar and finished 1997 down about 3.5 percent from its 1996 year-end level.

In 1998, the *peso* depreciated more or less steadily over the course of the first three quarters, closing the first quarter at 8.5 to the dollar, the second quarter at 9.0 to the dollar and the third quarter at 10.1 to the dollar. The main factors contributing to the *peso* decline in this period have been external to the economy, particularly since August when the crisis in Russia triggered intensified pressures on emerging markets globally.

Under the Economic Program established for budgetary purposes, a zero real exchange-rate depreciation for 1998 was assumed, implying an annual average exchange-rate reference level of 8.74 pesos per dollar. Through the first three quarters of 1998, the average *peso* exchange rate was broadly consistent with this level.

FOREIGN DIRECT INVESTMENT

Foreign Direct Investment (FDI) received by Mexico in 1997 totaled 12.1 billion dollars, a record high that signifies an increase of about 50 percent in volume compared to that of 1996. FDI accounted for more than three fourths of total foreign investment and financed entirely the current account deficit of 7.3 billion dollars. Yet, in 1997, external saving represented less than 15 percent of total investment, far from the 30 percent figure in 1994. By sector, 62 percent of FDI financed manufacturing projects, 37 percent went to the services sector, and the remaining 1 percent to agricultural and mining projects. In 1998, the target for FDI was around US$ 10.0 billion dollars.

FISCAL POLICY

In 1997, Mexico continued with its commitment to strong public finances. **The public sector balance** showed a deficit of 0.8 percent of GDP, only a 0.3 percentage point over the goal. However, if the payment of costs associated with financial system support programs – 1.2 percent of GDP – are excluded, the public sector registered a surplus of 0.5 percent of GDP. The primary balance surplus represented 3.4 percent of GDP, a little higher than the programmed figure.

Public revenues increased 4.3 percent in real terms over 1996 as the ratio of total tax revenues (oil and non-oil) to GDP reached 9.6 percent. This is 0.4 percentage points higher than the original projection and 0.6 percentage points higher than in 1996. Non-oil revenues continued to grow in importance as the share of oil revenues in total revenues decreased from 38.0 percent to 36.6 percent.

Net public expenditures increased 6.7 percent in real terms. Non-program expenditures, composed mainly of interest payments and state and municipality revenue sharing, grew 4.6 percent in real terms. Interest spending, including the cost of financial system support programs, decreased 2.7 percent in real terms, and state and municipality revenue sharing increased 10.6 percent in real terms.

For 1998, the Mexican government has reaffirmed its commitment to fiscal policies designed to reduce inflationary pressure and to create a more stable economic environment, which will result in increased domestic savings, higher levels of capital accumulation and a reduction in the net public debt-to-GDP ratio. To achieve these objectives, the programmed public deficit in 1998 will be equivalent to 1.25 percent of GDP, with a primary surplus of 2.3 percent of GDP. The government deficit will be financed mainly through domestic debt.

MONETARY POLICY

In 1997, the Bank of Mexico maintained its neutral monetary policy stance designed to reduce inflation over the course of the economic recovery. In line with its commitments, the Bank announced in advance the course of the monetary base stock for 1997, on a daily basis, with goals of 4 percent in real GDP growth, and 15 percent Consumer Price Index growth. Additionally, quarterly limits on net domestic credit growth, and a minimum net international asset accumulation commitment, were established.

However, during most of 1997, and particularly beginning in May, due to a better-than-expected economic performance, money demand was stronger than forecast. Maintaining its neutral stance, the central bank accommodated the higher demand by allowing base money supply to increase by 29.6 percent, five percentage points above the estimated growth for 1997.

Net international assets showed an increase of US$ 13.5 billion, substantially higher than the minimum amount envisaged in the monetary program. There are two main reasons for this: a high level of foreign currency revenues, as a result of operations with the state-owned oil firm (PEMEX); and a substantial increase in the foreign currency purchasing program through the option mechanism

Although the monetary base increased more than expected during 1997, international assets rose in a much higher proportion, which resulted in a decline in the **net domestic credit** of the central bank, maintaining it below the limits established for 1997. However, this result did not imply any monetary restriction.

For 1998, the central bank assumptions were that the monetary base would rise 22.5 percent compared to the end of 1997. This change in base money would result from projected growth in GDP (5 percent) and inflation (12 percent), combined with a re-monetization of 4.2 percent of the total base at the close of 1997.

The actual course of monetary policy in 1998 has been largely dictated by the developments on the exchange market. With the exchange rate under pressure, the central bank raised short-term interest rates to maintain orderly trading in the currency. The 28-day Treasury Bill rate (*cetes*), after declining in 1997 to below 20 percent, was gradually raised over the course of the first half. In late August, when the pressures intensified following the escalation of the crisis in Russia, interest rates were raised by 5 percentage points to the 27 percent range to support the peso. In September, the *cetes* was raised by nearly 10 percentage points in two consecutive moves to reach the 47 percent range before returning to the mid-30 percent range as pressures abated.

MEDIUM-TERM OUTLOOK

Mexico is an open economy with sharp income inequalities that have to be overcome. Under these circumstances, the Mexican government has set out, as its main long-term economic objectives, to attain an average annual GDP growth rate of 5 percent with annual inflation kept within single digits, and to turn these achievements into a better standard of living for the Mexican people. To obtain these goals the government has committed to a sound macroeconomic policy mix, that sets the basis for sustainable growth and diminishes external vulnerability, while orienting public social expenditure toward establishing programs for social development, as well as reinforcing present programs for alleviating poverty.

From the 1994-95 crisis, Mexico concluded that unmanageable external imbalances, combined with a semi-pegged exchange rate regime, could lead to recurrent financial problems. Bearing this in mind, macroeconomic policy now aims to encourage an increase in domestic savings rates, strengthen the financial system, and maintain the established free floating exchange rate regime. Some long-lasting structural reforms have already been carried out, and others are in the offing.

In promoting domestic savings, the main policy strategy involves pension system reform requiring compulsory individual retirement saving. It is expected that individual retirement accounts will accumulate resources equivalent to 3.5 percent of GDP by the end of the year 2000. The very nature of these savings makes them ideal for financing long-term projects such as infrastructure and housing. In addition, a comprehensive tax administration reform has been completed.

Concerning the financial system, the Mexican government has tabled draft legislation designed to establish the basis for reducing the risks of banking crises. A reduction in the limits of banking deposit insurance, the elimination of restrictions on foreign investment, and prudential regulation and supervision, are intended to bring about a more competitive financial system.

Under these reforms, the exchange-rate policy which is currently run by the Federal Government, would be granted to the Central Bank. Total autonomy would also be conferred on the National Banking and Securities Commission.

Throughout all these changes, Mexico will maintain sound fundamentals with which to face the future challenges of a small open economy.

Mexico's Measures to Address the International Financial and Economic Crisis

Mexico has reaffirmed its commitment to addressing international financial and economic turbulence through sound fundamentals, emphasizing fiscal prudence and stability-oriented monetary policy, combined with maintenance of a social safety net and advancing social policy goals in the areas of health, education, women's rights and rural development – the underlying factors that support both short-term and longer-term growth.

The lessons learned from the economic crisis of 1995 concerning the risks associated with large current account deficits and excessive short-term foreign borrowing in the context of pegged or semi-pegged exchange rates and the importance of ensuring stability and soundness in the financial system have been applied in managing the economy through the current period of international turbulence.

- The exchange rate has been allowed to float and monetary policy measures (direct intervention and raising interest rates) have been used to ensure orderly trading during periods of rapid capital flows, rather than to defend specific exchange rate levels.
- Mexico has taken measures to ensure that external deficits are financed by longer-term flows rather than more volatile short-term portfolio investments.
- Mexico has also reduced its dependence on oil, which has helped it to sustain growth in the face of the very low oil prices that have prevailed in 1998.
- Measures have been taken to increase competition in the economy to make it more flexible and adaptive, including through a legal reform initiated in March 1998 to permit 100 percent foreign investment in the banking system and the continued privatization of state-owned enterprises.
- Finally, efficient corporate governance practices have been intensified in the banking system, and transparency practices in banking accounting, disclosure, self-regulation and prudent supervision have been emphasized to increase confidence of investors in the banking system.

Mexico: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year)						
Nominal GDP (billion US$)	363.61	403.2	420.78	286.84	334.79	394.34
Real GDP	3.6	2.0	4.4	-6.2	5.2	7.0
Total Consumption	2.5	1.4	2.4	-6.7	-1.1	5.7
• Private Consumption	1.8	0.1	-0.4	-6.4	-0.7	6.3
• Government Consumption	8.7	11.1	5.4	-10.3	-1.9	1.8
Total Investment	8.2	-5.1	4.3	-17.0	6.8	20.9
• Private Investment	4.5	-6.3	5.4	-17.9	5.4	n/a
• Government Investment	-7.3	0	0	-13.5	12.1	n/a
Exports	8.1	12.3	16.5	31.9	20.1	14.7
Imports	24.4	8.1	20.6	9.1	23.4	0.3
Fiscal and External Balances (% of GDP)						
Budget Balance	1.4	0.7	-0.3	-0.2	-0.2	-0.8
Merchandise Trade Balance (f.o.b.)	-4.4	-3.3	-4.4	2.5	2.0	0.2
Current Account Balance	-6.7	-5.8	-7.0	-0.6	-0.6	-1.8
Capital Account Balance	7.3	8.1	3.5	5.4	1.0	3.6
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	14.4	9.5	8.3	37.9	31.7	18.8
CPI	15.5	9.8	7.0	35.0	34.4	20.6
M2	20.3	13.4	21.3	38.7	28.2	21.7
Short-term Interest Rate (%)	16.8	11.8	20.1	48.7	27.3	19.8
Exchange Rate (Peso/US$)	3.09	3.12	3.38	6.24	7.60	7.91
Unemployment Rate (%)	2.8	3.4	3.6	6.3	5.5	3.2
Population (millions)	85.63	87.34	89.09	91.16	92.78	94.35

Source: Data are as submitted by member economies, unless otherwise specified.

Forecasting Summary (% change from previous year)

	1998				1999-2001			
	Official	IMF	LINK	OECD	Official	IMF	LINK	OECD
Real GDP	4.5	4.5	4.5	5.3	5.4	n/a	4.5	4.9
Real Exports	11.6	n/a	4.2	12.5	n/a	n/a	10.2	11.0
Real Imports	13.8	n/a	14.7	16.1	n/a	n/a	11.9	14.4
CPI	n/a	15.3	n/a	n/a	11.8	n/a	n/a	n/a

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998). The LINK forecast is from the World Outlook (Project LINK, September 1,1998); figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

NEW ZEALAND

GDP

In 1997, the economy continued to grow at a moderate pace, recording annual growth of 2.3 percent. This, however, was down from growth rates of 3.2 percent in 1996 and 4 to 6 percent in 1993-95.

During 1997, **domestic demand** remained firm. **Private consumption** expenditure grew by a solid 3.1 percent, supported by growth in consumption of non-durables and services as spending on motor vehicles slowed. **Investment** growth also remained firm through 1997, recording 4.0 percent annual growth. However, this is well down compared to the double-digit growth rates recorded in the 1993 to 1995 period.

Net exports, however, made a negative contribution to growth over the course of 1997 as growth in imports outpaced growth in exports. This reflected continued growth in domestic demand supporting import growth, while export growth had yet to feel the benefits of the lower New Zealand dollar (which has depreciated since April 1997).

Nevertheless, growth in the tradable sector overtook growth in the non-tradable sector in 1997 after lagging behind it for three years. This reflects an adjustment in the key drivers of growth in the economy. This adjustment continued in the first half of 1998 with export growth sustained, helped by diversification into new markets and the lower level of the New Zealand dollar. However, domestic demand contracted reflecting the effects of the Asian crisis, a drought, and a weaker world outlook on the domestic economy. The moderate tightening of interest rates in the first half of 1998 to help offset inflationary effects from the depreciating exchange rate may also have been a factor. Overall, the economy saw a decline in output in the first half of 1998 of 1.3 percent from the second half of 1997, resulting in zero growth in real GDP on a year-over-year basis in the first half of this year.

INFLATION

Inflationary pressures moderated during 1997 as slowing growth reduced pressure on scarce resources in the economy. In addition, import prices benefited from the steady appreciation of the New Zealand dollar up until early 1997. Consumer prices rose by 0.8 percent in the year to December 1997, down from 2.6 percent a year earlier. Excluding credit services charges, annual inflation was 1.6 percent in December. This is near the middle of the Reserve Bank of New Zealand's 0 percent to 3 percent target band.

The CPI growth has remained low in 1998, rising 1.5 percent in the first half of 1998 over the corresponding year-earlier period. This is consistent with the expected annual outcome of 0.7 percent through 1998. The weaker level of economic activity has limited the ability of firms to pass on the recent depreciation in the exchange rate into their prices. In addition, weak international commodity prices and further tariff reductions have helped to offset the inflationary impact of the lower exchange rate.

EMPLOYMENT

Despite economic growth slowing from 1995, **employment** growth had continued at relatively high rates. However, during 1997 employment growth weakened to an annual 0.4 percent, down from 3.7 percent in 1996. As labour force growth outstripped employment growth, the **unemployment rate** rose to 6.7 percent at the end of 1997. The unemployment rate continued to rise in the first half of 1998 with the decline in economic activity to reach 7.7 percent in the June quarter.

Employment growth is expected to remain subdued through 1998 as firms delay hiring in the face of weak business confidence. The unemployment rate is expected to remain around current levels over the course of the year.

CURRENT ACCOUNT

The **current account** deficit widened over the course of 1997 to 7.7 percent of GDP, up from 3.9 percent a year earlier. Contributing factors to the widening deficit were a fall in the transfer of migrants' funds to New Zealand, a fall in returns to New Zealand residents on their overseas investments, and a fall in tourism earnings.

These changes were partly offset by a rising trade surplus. The trade balance is expected to improve further in response to the lower exchange rate. However, the current account deficit is expected to remain around 7 percent of GDP through 1998 before improving slowly after the import of a frigate (valued at 0.6 percent of GDP) in March 1999.

EXCHANGE RATE

Against the US$, the **New Zealand dollar** (NZD) slipped from just over US$ 0.70 at end-1996 to US$ 0.58 at end-1997 and further to US$ 0.51 at mid-year 1998, an overall decline of 28 percent over that period. Since then it has regained some ground moving back to the US$ 0.52 to 0.54 range. On a trade-weighted basis, the NZD moved from an index below 54 in early-1993 to peak at around 69 in April 1997. Since then, the dollar has depreciated significantly to the 57 level at mid-1998.

The depreciation of the NZD has reflected an adjustment to New Zealand's large current account deficit, the sanctioning of a market-led easing in monetary conditions by the Reserve Bank, and the weaker outlook for the Asian region (which will dampen growth in New Zealand's exports). However, to some extent the fall in the New Zealand dollar has also been part of a downward trend in Asian bloc currencies relative to the US dollar.

FOREIGN DIRECT INVESTMENT

Net foreign direct investment (FDI) flows into New Zealand in the year to March 1997 totaled US$1.4 billion, down from US$3.6 billion in the previous year. The key component of foreign direct investment was equity capital inflows, which amounted to US$1.2 billion in 1996/97. However, both equity capital and reinvested earnings inflows were lower in the year to March 1997 than in the year to March 1996. In fact there was a net outflow of reinvested earnings for 1997 due to larger dividend payments made to overseas direct investors. This was due in part to the introduction of the **Foreign Investor Tax Credit** regime, which has enabled non-resident shareholders to access tax credits to offset their non-resident income tax liability.

New Zealand **direct investment abroad** in the year to March 1997 was a net disinvestment of US$0.8 billion. Net increases in equity capital and reinvested earnings were more than offset by net declines in other long-term capital.

FISCAL POLICY

The government has consistently achieved operating surpluses since 1994. In the year to June 1997, an operating surplus (on an accruals basis) of 2.0 percent of GDP was recorded. However, the operating surplus is now forecast to shrink in 1998/99 and go into deficit in 1999/2000, due mainly to lower tax revenue and increased expenses.

The size of the current account deficit and the economic crisis in East Asia continue to pose risks to the fiscal position. In response to these risks the Government reduced its spending intentions earlier this year by a total of NZD300 million (around US$160 million) over the years to June 1999 and June 2000.

More recently the government announced a "Policies for Progress" Package, which seeks to strengthen the medium-term economic and fiscal position of New Zealand and to improve the quality of spending. For example, there will be significant fiscal savings from reducing the superannuation wage floor from 65 per cent to 60 per cent of the average wage. The package also included the elimination of all tariffs by 2006.

MONETARY POLICY

The Reserve Bank of New Zealand is responsible for managing monetary policy with the intention of maintaining price stability. Since December 1996, price stability has been defined as consumer price inflation (excluding credit services) between 0 percent and 3 percent. Prior to December 1996, price stability was defined as inflation of between 0 percent and 2 percent.

The Reserve Bank eased **monetary policy** through 1997 (and 1998) as inflationary pressures eased and the amount of spare capacity in the economy increased. The easing in monetary policy has occurred mainly through the exchange rate. Domestic interest rates had remained relatively high to help offset the inflationary consequences of the depreciating exchange rate, but in recent months have dropped to 28-year lows.

MEDIUM-TERM OUTLOOK

The weaker level of economic activity in the first half of 1998, with negative growth registered in the first two quarters, is likely to result in the economy showing a small decline. However, a modest strengthening of growth is expected through the second half of the year, with underlying support coming from the ease in monetary conditions. Growth is then expected to accelerate somewhat. Although growth is forecast to rise above the potential rate of growth in the economy in the medium term (estimated to be 3 percent to 3.5 percent), inflation is expected to remain well within the Reserve Bank of New Zealand's target band for inflation of 0 percent to 3 percent.

Subdued inflationary pressures, a strengthening fiscal position and a competitive exchange rate should support export activity and facilitate economic adjustment. For 1999, the IMF now projects growth of 2.0 percent, following 0.5 percent in 1998.

New Zealand: Summary of Policy Position to Address the Regional Economic and Financial Crisis

New Zealand has maintained its commitment to getting the economic fundamentals right as the best approach to weathering turbulent international market conditions such as have developed in the course of the regional crisis. These policies include:

- Maintaining prudent fiscal management and fiscal policy credibility by continuing progress towards the Government's long-term fiscal targets.
- Maintaining monetary policy credibility by continuing to target and achieve inflation outcomes of 0-3 percent.
- Maintaining deregulated financial markets and an effective prudential banking supervision regime.
- Allowing market-led adjustments in flexible interest rates and exchange rates in response to changing economic circumstances.
- Maintaining low barriers to trade so that the export tradeable sector can adjust to changing prices and patterns of demand.
- Continuing with the economic reform process so as to improve the competitiveness of New Zealand industry through further microeconomic reforms.

New Zealand: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP(billion US$)	39.5	43.0	50.8	59.5	65.2	64.5
Real GDP	0.8	5.0	5.9	3.9	3.2	2.3
Total Consumption	n/a	n/a	n/a	n/a	n/a	n/a
• Private Consumption	-0.1	2.2	5.7	4.6	4.7	3.1
• Government Consumption	3.1	-0.5	-1.1	2.5	2.1	5.8
Total Investment	n/a	n/a	n/a	n/a	n/a	n/a
• Private Investment	7.0	21.8	16.7	13.5	4.8	-0.6
• Government Investment	-16.7	-14.1	17.0	2.2	17.2	31
Exports of Goods and Services	2.7	5.9	10.3	3.7	3.6	2.1
Imports of Goods and Services	8.3	5.8	13.2	8.9	8.2	4.0
Fiscal and External Balances (% of GDP)						
Budget Balance (1)	-7.0	-1.1	0.9	3.1	3.6	2.1
Merchandise Trade Balance (f.o.b.)	4.1	4.1	2.7	1.5	0.8	0.9
Current Account Balance	-2.7	-1.2	-2.2	-3.1	-3.9	-7.7
Capital Account Balance	n/a	n/a	n/a	n/a	n/a	n/a
Economic Indicators (% change from previous year, except as noted)						
GDP deflator	1.7	2.8	1.6	2.6	1.9	0.1
CPI (2)	1.3	1.4	2.8	2.9	2.6	0.8
M2	10.5	7.0	5.1	9.2	13.5	8.2
Short-term Interest rate (3) (%)	6.7	6.3	6.7	9.0	9.4	7.7
Exchange Rate (NZD/US$)	1.86	1.84	1.68	1.52	1.45	1.51
Unemployment Rate (%)	10.3	9.2	7.4	6.2	6.0	6.7
Population (millions)	3.53	3.58	3.63	3.69	3.74	3.78

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Budget balance refers to government accrual operating balance, June years. (2) CPI figures are for the 12-month period to December of the given year. (3) Short-term interest rate is the 90-day corporate paper rate from the IMF, International Financial Statistics.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	-0.5	-0.5	2.3	n/a	3.1	2.9	1.7	3.5	n/a	3.4
Real exports	1.0	n/a	-0.9	n/a	3.8	6.0	n/a	8.5	n/a	6.6
Real imports	1.1	n/a	1.1	n/a	4.4	4.0	n/a	7.9	n/a	5.5
CPI	0.7	1.4	n/a	n/a	1.9	1.1	1.6	n/a	n/a	1.7

Note: The official figures for 1998 refer to March year 1998/99, while the figures for 1999-2001 refer to March year 1999/2000, The IMF forecast is from the World Economic Outlook (IMF, September 1998), figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, September 1,1998); figures for the period 1999-2001 refer to 1999 only; The OECD forecast is from the OECD Economic Outlook (OECD, September 1998), figures for the period 1999-2001 refer to 1999 only.

PAPAU NEW GUINEA

Papua New Guinea experienced a difficult year in 1997 under the impact of negative shocks, most importantly a major drought that cut deeply into agricultural production; weakening prices for gold, copper and oil, three of this economy's key exports; the damage wrought by a tidal wave that hit the island in early 1998; and not least the international economic financial and economic crisis that has affected emerging market and developing economies. However, prospects are for a return to positive growth in 1998.

GDP

Following a currency crisis in mid-1994 brought on by a succession of significant budget deficits and a fall in oil prices, Papua New Guinea appeared to be consolidating stabilization gains with the help of an IMF/World Bank support package put together in mid-1995 which was tied into a restructuring program involving trade and investment liberalization, forestry reform, price decontrol, and public-sector reforms. As well, progress was made towards resolving long-standing social unrest. Real GDP bounced back quite well in 1996 with a 3.9 percent increase.

In 1997, however, real GDP fell by 4.6 percent. The key factors were: the drought,[1] price declines for three key commodity prices, gold, copper and oil, and sharp declines in the volume of production of copper (estimated decline of 32 percent in 1997) and oil (estimated decline of 30 percent).

For 1998, growth is being predominantly driven by the mineral and petroleum sectors masking weaknesses in other sectors, particularly the agriculture sector, which has yet to recover from last year's drought. Although rains relieved the drought in 1998, the main agricultural crops of coffee, cocoa, palm oil and copra are expected to be well below 1997 levels. This, along with the damage to the economy from an earthquake-induced tidal wave in early 1998, will dampen growth prospects this year; current projections call for output growth of 2.5 percent.

INFLATION

Consumer price inflation, which had been held broadly in check during the early 1990s, jumped into double-digits following the devaluation of the kina in 1994. It has since been reduced from 17.3 percent in 1995 to 11.6 percent in 1996 and further to only 3.9 percent in 1997. However, the weakening of the kina in the fourth quarter of 1997 led

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[1] The drought not only affected agricultural output, it also led to mining activity cutbacks due to the scarcity of water for processing of ore. One mine was forced to temporarily suspend shipments in August 1997 for this reason.

to acceleration in price growth to 5.3 percent on a year-over-year basis. The further depreciation of the kina in the first half of 1998 will lead to higher rates of price increase this year, with consumer good prices increasing by 5.6 percent over the first half of the year.

CURRENT ACCOUNT

The current account jumped into large surpluses in 1993-95 as resource-generated exports more than doubled while imports grew much more slowly. However, in 1996, lower average prices over the year for several key export commodities (especially copper, oil and gold) resulted in export receipts declining by approximately 16 percent. With the value of imports rising by 22 percent, the current account surplus declined from 15.6 percent of GDP in 1995 to an estimated 3.8 percent of GDP in 1996.

In 1997**, export** receipts declined by a 13.3 percent, following the 5.6 percent decline in 1996. This reflected steep declines in export earnings from the mining sector. Gold export earnings were down 18 percent, reflecting primarily a decline in world gold prices; copper export receipts were down 31 percent reflecting both lower prices and lower production; and oil export earnings were down 35 percent, reflecting depletion of reserves. Non-mineral export earnings on the other increased. This included a 44 percent increase in coffee export receipts, entirely on the strength of higher prices as export volumes declined by 5 percent. Export receipts on palm oil grew by 20 percent on volume gains of 39 percent which more than offset price declines of 13 percent.

Imports on the other hand grew rapidly by 8.0 percent in 1997, following a 19.3 percent gain in 1996. The **terms of trade** declined by 10 percent in 1997 because of declining copper, gold, and timber prices. With these developments the **merchandise trade surplus** shrank to US$ 557 million from 1.0 billion in 1996. This contributed to the current account swinging into a deficit estimated at about 2.5 percent of GDP in 1997.

EXCHANGE RATE

The exchange rate had been following a moderate downward trend against the US$ dollar since the devaluation in late 1994. The kina depreciated by 3 percent against the US dollar in 1996, and a further 6 percent over the first three quarters of 1997. During this period, foreign exchange reserves were rebuilt to the US$ 550 million range (approximately 11 percent of GDP and 5 to 6 months of import cover), after having bottomed out in the first quarter in 1995.

A number of factors combined to weaken the currency since the fourth quarter of 1997. These include principally the decline in the terms of trade, the requirement for significant food imports as a result of the drought, the prospective decline in volumes of agricultural and mining exports, and generally reduced confidence. The kina closed the year at US$ 0.57, down from US$ 0.696 at the close of the 3rd quarter. For the year, the kina averaged US$ 0.6975, down 8 percent from its 1996 average of US$ 0.7588. The kina fell a further 11 percent over the course of the first quarter of 1998 to finish

March at US$ 0.508. Reserves fell to the US$ 186 million mark at the end of the first quarter.

FISCAL SITUATION

Restoration of prudent fiscal policies has been a key aspect of the policy package to restore economic stability. Measures have included tax reforms and a real reduction in spending through public service cuts and wage restraint. Reflecting these measures, the fiscal position shifted from a deficit of 0.8 percent of GDP in 1995 to a surplus estimated at 0.3 percent in 1996. Estimates suggest that only a small budget deficit was incurred in 1997, on the order of 0.3 percent of GDP, on the strength of a strong first half, including good tax revenues from the mining sector in that period (which reflected in part payment of back taxes).

For 1998, on the expenditure side, lingering pressures from the drought remained in early 1998 in terms of providing communities with food support. On the revenue side, the delay in the implementation of the value-added tax to 1999 will temporarily weaken the revenue base as tariff reductions have already been implemented. Income tax rates have been raised but the income tax base is small.

With the fiscal framework reforms mandated by the new constitutional law, budgetary funds have been earmarked to meet the financial requirements of the provincial and local governments, which are being given enhanced responsibilities. Progress in implementing the restructuring has been made difficult given resource constraints, particularly as regards administrative and technical manpower.

MONETARY POLICY

Following the floating of the kina, monetary policy was aimed at bringing down the rate of inflation. The Treasury Bill rate rose from an average of 6.9 percent in 1994 to 17.4 percent in 1995. Interest rates peaked in the first quarter of 1996 and started to ease in line with the rapid deceleration of inflation. The Treasury Bill rate averaged 14.4 percent in 1996 and continued to decline during 1997, falling to the 8.7 percent range in third quarter of 1997, before the renewed weakness set in. As the kina depreciated in the fourth quarter of 1997, the Treasury Bill rate was raised sharply to 14.5 percent in December 1997.

Banking sector fragility is a key issue for Papua New Guinea due to the rapid growth in deposits in the banking system in recent years that are convertible on demand to foreign currencies. Given the low level of reserves, the system is subject to risk of loss of confidence.

FOREIGN DIRECT INVESTMENT

The unstable macroeconomic situation in 1993-94 resulted in a net outflow of direct investment in those two years. However, inflows surged in 1995 to over US$ 450 million and continued relatively strong at US$ 230 million in 1996.

MEDIUM-TERM OUTLOOK

Papua New Guinea is dealing with long-standing structural problems. The key constraints are in terms of social development, including in the area of law and order, human resource development, and infrastructure. These underlying problems have impeded the implementation of the structural adjustment program, although the government did manage to meet some of the macroeconomic targets set under the program.

However, with the prospects of modest growth in 1998 to build on, Papua New Guinea should see strengthened growth in the medium term as the effects of the adverse shock experienced in recent times fade.

Structural Adjustments under the Economic Recovery Program

The Government of Papua New Guinea undertook a number of structural reforms under the Economic Recovery Program which was adopted with the 1995 budget. These structural adjustments were initiated to re-establish fiscal and monetary stability and the basis for stable medium-term growth. The main elements of the structural reform program were:

- shifting to a market-determined floating exchange rate;
- shifting to market-determined interest rates
- raising the minimum liquid assets ratio for banks;
- a commitment to limit the fiscal deficit to 1 percent of GDP;
- measures to enhance competitiveness and to restore business confidence;
- creating the basis for sustainable development of renewable natural resources, in particular of forests, through measures such as surveillance and monitoring of logging and fisheries;
- replacing import restrictions with tariffs and lowering tariffs on industrial inputs and other imports;
- public sector reforms, including lowering the number of public servants;
- measures to improve public services, especially in education, health and agriculture, including by raising budget allocations to these sectors;
- initiatives to upgrade economic infrastructure; and
- channeling development resources to the rural sector.

PAPUA NEW GUINEA: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	4.38	5.13	5.50	5.05	5.27	4.75
Real GDP	13.8	13.3	5.2	-2.9	3.9	-4.6
Fiscal and External Balances (% of GDP)						
Budget Balance	-1.8	-5.0	-5.6	-4.3	-0.8	0.3
Merchandise Trade Balance (f.o.b.)	14.8	29.9	25.1	29.8	19.8	8.9
Current Account Balance	2.2	12.8	10.8	16.7	5.5	-2.5
Capital Account Balance	n/a	-12.4	-11.0	-15.0	1.3	3.0
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	2.9	4.8	4.8	20.0	3.8	2.8
CPI	4.3	4.9	2.9	17.3	11.6	3.9
M2	24.9	7.0	2.6	-12.5	8.1	n/a
Short-term Interest Rate [1](%)	8.88	6.25	6.85	17.40	14.44	9.94
Exchange Rate (US$/Kina)	1.037	1.022	.9950	.7835	.7588	.6975
Unemployment Rate (%)	n/a	n/a	n/a	n/a	n/a	n/a
Population (millions)	3.85	3.92	4.00	4.07	4.16	4.21

Source IMF International Financial Statistics; IMF Staff Country Report No 98/18, March 1998; Asian Development Bank, Asian Development Outlook 1998; estimates by the APEC Economic Committee.
Note: (1) Treasury Bill Rate

REPUBLIC OF PERU

Peru is a diversified economy. Copper, gold, fish meal and textiles are the main products and the manufacturing sector accounts for around 20 percent of GDP. Energy production is being stepped up while considerable additional investment is targeting the mining sector. The government is also pursuing major structural reforms, including a privatization drive as part of an agreement with the IMF in respect of an Extended Fund Facility. Reducing the incidence of poverty remains a high priority for the government.

GDP

Following a slow-growth year in 1996, when policy had taken a restrictive stance to correct emerging external imbalances, Peru regained momentum in 1997. The strong recovery of 1997 allowed the Peruvian economy to grow 7.5 percent (1996: 2.5 percent). The main sources of growth during 1997 were exports and investment. **Exports** grew by 13 percent and **private investment** by 13.5 percent, both in real terms.

However, a combination of very low copper prices and the impacts of El Nino on the important fisheries sector and on agriculture have combined to widen the external imbalance and to slow growth in during the first half of the year 1998 when real GDP remained at the same level as in the corresponding year-earlier period.

INFLATION

The annual inflation rate dropped to 6.5 percent in 1997 from 11.8 percent a year earlier. This trend was temporarily reversed in the first half of 1998, with CPI growth accelerating to 7.7 percent on a year-over-year basis, largely because of higher food prices from the El Nino effect on agricultural output. The inflation rate is expected to be around 7.5 percent in 1998.

EMPLOYMENT

Unemployment in the Lima Metropolitan area rose from a rate of 7.2 percent in 1996 (third quarter) to 8.6 percent in 1997. These increases are influenced by growth in the working-age population, which reflects population growth in previous decades, as well as by increases in the labour force participation rate.

CURRENT ACCOUNT

External balances improved significantly in 1997. Increased investment in recent years allowed a diversification of exports, mainly in non-traditional sectors, where exports grew by 28.5 percent in dollar terms. The current account deficit declined from 5.9 to 5.2 percent of GDP between 1996 and 1997. However, in the first half of 1998, this widened to 6.9 percent of GDP. The deficit has been financed largely by foreign direct investment inflows associated with the mining sector.

The external sector will be affected in 1998 by the low levels of gold and copper prices, the effects of El Nino on fisheries and agricultural exports and the international economic and financial turbulence.

FOREIGN DIRECT INVESTMENT

The resource sector has been an important factor in attracting foreign direct investment to Peru, especially in mining, telecommunications and banking. In 1997, foreign direct investment, excluding privatization receipts, amounted to 2.9 percent of GDP.

EXCHANGE RATE

Peru's **exchange rate** is determined by market forces. Central Bank interventions in the exchange market are consistent with a non-inflationary growth of the monetary base. In 1997, nominal depreciation of the domestic currency (*nuevo sol*) was 8.6 percent. In real terms, it implied a slight appreciation of 1.1 percent.

From year-end 1997 to the end of the third quarter in 1998, the *nuevo sol* declined by 12 percent in nominal terms against the US dollar.

FISCAL POLICY

Peruvian **fiscal accounts** have showed a primary surplus since 1991. In 1997, the primary surplus was 1.7 percent of GDP.

The steady improvement in the fiscal position resulted in the first overall balance (excluding privatization receipts) in 35 years, despite an increase in spending to help mitigate the effects of El Nino. The Peruvian Government is currently involved in the last stage of privatization activities, which begun in 1992, and the broadening of the tax base. The primary surplus is expected to remain at 1.7 percent in 1998, even considering an increase in spending directed at infrastructure projects, especially to rehabilitate highways, rural paths and dikes.

MONETARY POLICY

Peru's monetary authorities target an inflation range. To reach this goal, control of monetary aggregates has been applied since 1990, with the monetary base allowed to grow in line with demand to avoid inflationary pressures. Monetary instruments are exchange rate intervention, open market operations, rediscount operations and reserve requirements.

MEDIUM-TERM OUTLOOK

Economic growth is projected by the authorities to reach 3 percent for 1998 as a whole. This matches the IMF forecast. As noted, the slowdown from 1997 growth rates reflects in part the impact of the plunge in world copper prices on this key Peruvian industry. In 1999, real GDP growth is projected by the authorities to accelerate to a 6 percent pace. The inflation rate is expected to resume its downward course, moving to lower levels in 1999. The temporary widening of the deficit on merchandise trade in 1998 is also expected to be reversed in 1999. Long-term capital inflows are expected to continue being the main financing source of the current account deficit.

Peru: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	41.7	41.2	50.3	59.1	61.0	65.2
Real GDP	-1.7	6.4	13.1	7.4	2.5	7.2
Total Consumption	-0.6	4.2	9.7	8.5	1.6	4.2
• Private Consumption	-1.0	4.6	9.9	8.1	1.4	4.3
• Government Consumption	2.9	1.3	9.5	11.9	1.9	4.6
Total Investment	-3.9	13.4	28.9	20.3	-3.1	12.7
• Private Investment	-9.0	13.0	32.7	23.0	-1.8	13.5
• Government Investment	25.2	15.2	13.2	7.4	-10.1	8.0
Exports of Goods and Services	4.4	1.7	16.6	6.1	11.4	13.0
Imports of Goods and Services	7.4	1.1	26.2	26.5	0.6	11.3
Fiscal and External Balances (% of GDP)						
Budget Balance [1]	-3.5	-2.8	-2.3	-2.8	-1.1	0.0
Merchandise Trade Balance (f.o.b.)	-0.3	-0.6	-1.0	-2.2	-2.0	-2.7
Current Account Balance	-5.0	-5.6	-5.3	-7.3	-5.9	-5.2
Capital Account Balance [2]	5.5	6.0	11.0	7.7	7.5	7.7
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	60.8	48.1	19.2	12.3	11.8	6.5
CPI [3]	73.3	48.6	23.7	11.1	11.6	8.5
M2	64.8	46.8	60.0	27.7	17.1	19.6
Short-term Interest Rate [4] (%)	48.5	28.6	16.1	18.4	18.2	16.0
Exchange Rate (NS/US$)	1,246	1,988	2,195	2,253	2,453	2,660
Unemployment Rate (%)	9.4	9.9	8.9	7.1	7.2	8.6
Population (millions)	22.4	22.7	23.1	23.5	23.9	24.1

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Budget balance refers to the non-financial public sector. (2) Capital account balance includes exceptional financing. (3) End of period. (4) Short-term interest rate is the Discount Rate (end of period)

Forecasting Summary (% change from previous year)

	1998				1999-2001			
	Official	IMF	LINK	OECD	Official	IMF	LINK	OECD
Real GDP	3.0	4.0	3.8	4.0	6.0	n/a	4.4	5.0
Real Exports	n/a	n/a	0.9	n/a	n/a	n/a	7.2	n/a
Real Imports	n/a	n/a	8.0	n/a	n/a	n/a	9.0	n/a
CPI	7.5	7.5	n/a	6.0	n/a	n/a	n/a	5.0

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998). The LINK forecast is from the World Outlook (Project LINK, September 1,1998); figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

REPUBLIC OF THE PHILIPPINES

GDP

In 1997, **real GDP** grew by 5.2 percent amidst the financial crisis that swept through the Asian economies during the second half of the year. This was a modest reduction from the 5.7 percent pace of expansion achieved in 1996.

Real GNP posted 5.3 percent growth in 1997 (1996: 7.2 percent) of which 41.6 percent was accounted for by services, 34.4 percent by industry and 19.8 percent by agriculture, fishery and forestry. Net factor income from abroad accounted for the remaining 6.4 percent of the GNP increment.

Growth of **exports of goods and services** (in real terms) accelerated to 17.5 percent in 1997 (1996: 15.4 percent). This reflected growth in merchandise exports of 14.6 percent and growth in exports of non-factor services of 23.4 percent. Growth of exports of goods and services outpaced growth of **imports of goods and services**, which slowed to 14.4 percent (1996: 16.7 percent).

In nominal terms, **merchandise exports** grew by 22.8 percent, up from 17.7 percent growth in 1996. The bulk of export earnings was accounted for by electronics (US$13.1 billion), garments (US$2.3 billion) and machinery and transport equipment (US$2.7 billion). **Merchandise import** growth slowed to 14.0 percent in 1997 from 20.82 percent in 1996.

The *peso* depreciation and high interest rates during the second half of 1997 slowed **investment** in real terms to 11.7 percent for the year as a whole. This was due largely to the slackening of construction that started during the second quarter of the year, which outweighed the modest increases posted by investment in durable equipment and, within the agricultural sector, in breeding stocks.

During the first half of 1998, real GDP remained 0.2 percent above its year-earlier level. With the end of the drought conditions in the second quarter, agricultural output should rebound, supporting activity in the second half.

INFLATION

In 1997, the **inflation rate** was 5.1 percent, the lowest average rate in 10 years and considerably reduced from the 8.4 percent in 1996. In fact, prior to the onset of the crisis, the rate of CPI increase over the first 8 months of the year had come down to 4.6 percent compared with the year-earlier period. Prudent monetary management and favorable fiscal performance enabled the economy to proceed along the path of non-inflationary growth. Much lower growth in food, beverage and tobacco prices (1.9 percent in 1997 compared to 9.8 percent in 1996) also contributed substantially to the decrease.

However, with the peso depreciation in the second half of 1997, CPI growth moved back up to 6.0 percent by year-end 1997 and further to 7.0 percent on a year-over-year basis in the first quarter of 1998. In the second quarter, inflation accelerated rising 9.0 percent on average over the year-earlier period and spiking to 9.9 percent in June, due to supply side pressures related to El Nino impacts on agricultural production. In the third quarter, the year-over-year inflation rate slowed marginally from its June pace to 9.6 percent, as the pace of food price increases moderated. Through the first three quarters of 1998, the Philippines averaged 8.5 percent inflation on a year-over-year basis, comfortably below the Philippines' government forecast of 9.25 – 9.75 percent for the year.

EMPLOYMENT

Total **employment** increased by 1.9 percent to 27.7 million in 1997 (1996: 27.2 million), but lagged **labour force** growth of 2.1 percent, resulting in the **unemployment rate** increasing slightly from 8.6 percent to 8.7 percent in 1997.

By sector, the services and the industrial sectors saw robust growth in employment in 1997 (by 5.9 and 4.5 percent, respectively). Employment in the manufacturing sub-sector increased slightly by 1.3 percent. The agriculture sector, however, suffered a decline in total employment by 2.8 percent during the same year. The services sector saw its share of total employment increase from 40.9 percent in 1996 to 42.5 percent in 1997, followed by the industrial sector whose share slightly increased from 16.3 percent to 16.7 percent during the same period.

The weaker level of economic activity in the first half of 1998 resulted in the unemployment rate rising sharply to reach 13.3 percent in first quarter and 8.9 percent in the second quarter of this year.

CURRENT ACCOUNT

The current account deficit widened to US$ 4.3 billion or 5.2 percent of GDP in 1997 from US$ 3.9 billion or 4.8 percent of GDP a year earlier. The deficit on merchandise trade narrowed slightly to US$ 11.13 billion from US$ 11.34 billion a year earlier. However, this improvement and higher net inflows from services and transfers were not enough to offset an increase in the deficit on investment income. By comparison, the current account deficit averaged 4 percent as a share to GDP from 1991 to 1997.

With the depreciation of the *peso*, the Philippines' trade deficit fell sharply in the first quarter of 1998, to a cumulative total of only US$ 1.34 billion, down from US$ 5.66 billion in the year-earlier period. The gains were made both in terms of increased exports, which were up 18.8 percent on a year-over-year basis in this period, and through compression of imports, which contracted by 12.2 percent, reflecting the weakening in domestic demand.

EXCHANGE RATE

During the currency turbulence, the Philippine *peso* has moved broadly in line with a number of other regional currencies, declining steadily over the course of the second half of the year, experiencing a steep depreciation in January 1998 when markets generally overshot and recovering somewhat over the balance of the first half of the year. Thus, the peso moved from an exchange rate of 26.38 to the US dollar at the end of the second quarter of 1997 to 33.87 at the end of the third quarter and further to 39.98 at year-end. The January sell-off of Asian currencies took the peso down below 42 while the subsequent recovery left it trading in the 38-40 range. The further intensification of pressures on emerging markets in mid-1998 resulted in the peso moving lower to close the second quarter at 42.09. The peso has since traded in the 42 to 44 range.

Given these developments, the peso has averaged approximately 40-41 to the US dollar through the first three quarters of 1998, or a nominal depreciation of about 27 percent from its 1997 average of 29.47.

FOREIGN DIRECT INVESTMENT

Total FDI from non-residents registered a decline of 20 percent from US$1.5 billion in 1996 to US$1.2 billion in 1997. Meanwhile, the **Board of Investments (BOI)** approved US$6.6 billion worth of investments in 1997, 50 percent higher than its 1996 level of US$4.4 billion. More than half of the investment projects approved in 1997 were accounted for by public utilities followed by commercial services and real estate, and manufacturing. As regards energy-related projects, BOI-approved investments rose by 320 percent from US$146.33 million in 1996 to US$615.13 million in 1997. Investments in mining rose 187 percent from US$132.34 million in 1996 to US$379.74 million in 1997.

FISCAL POLICY

In 1997, for the fourth straight year, the national government posted a surplus amounting to P1.6 billion reflecting intensified fiscal efforts to boost revenues and control spending.

Revenue collection registered impressive growth with collections from tax and non-tax sources growing by 20.7 percent and 40.2 percent from a level of P260.8 billion and P42.6 billion in 1996, respectively.

Meanwhile total national government expenditures grew to P470.3 billion in 1997, up 16.4 percent from P404.2 billion in 1996. This was however, still P13 million less than the projected growth of expenditures for 1997, due in part to lower domestic borrowing.

In 1998, the lower level of economic activity and the higher interest costs have pushed the national government budgetary position into deficit. Through the first nine months of 1998, the deficit amounted to P25.7 billion. The government has indicated its hope of containing the expansion of the deficit to P40 billion or less for the year as a whole.

MONETARY POLICY

Monetary policy has been geared towards contributing to sustainable economic growth through maintenance of price stability, *peso* convertibility and a strengthened financial system. In the first half of 1997, the Bangko Sentral ng Pilipinas (BSP-Philippine central bank) continued its policy of bringing down intermediation cost of banks and ultimately interest rates by reducing reserve requirements on bank and non-bank deposits and deposit substitutes. These were lowered to 15 percent in July 1997, compared to a high of 25 percent in 1992. As well, efforts were made during the first quarter to build up the level of foreign reserve money.

With the emergence of pressures on the peso in the second half of the year, monetary policy was tightened to contain speculation in the currency market. Smoothening operations to mitigate the decline of the peso in the latter part of the year reduced the level of reserve money by 22.8 percent from US$ 11.7 billion at year-end 1996 to US$ 8.8 billion at year-end 1997. Increases in the overnight lending rate of the BSP and increases in reserve requirements of banks led to increases in the lending rate of commercial banks from 14.6 percent at the beginning of the 1997 to as high as 20.9 percent in October before tapering off to 20.4 percent at year-end.

In 1998, the BSP has kept a tight rein on monetary conditions, limiting the reserve money supply (which covers currency in circulation plus deposit liabilities of the banks to the BSP) to well below the ceiling set out in the two-year precautionary borrowing arrangement with the IMF. Nonetheless, the lending rate declined further over the course of the first half of 1998, falling to the 16 percent level in June 1998.

MEDIUM-TERM OUTLOOK

The Philippines' economic prospects remain generally positive in the medium term. In this regard, the Philippines is counting on the improvement in its macroeconomic fundamentals through significant structural reforms including, *inter alia,* liberalization of trade in goods and services, deregulation and privatization that, in the pre-crisis period, had led to the strongest macroeconomic performance in recent years. Furthermore, fiscal policy is to continue its consolidation orientation.

For 1998, the authorities project growth of 1 percent; by comparison the IMF's latest forecast projects a marginal decline of 0.6 percent for the year as whole. On the positive side, inflation has been contained for the most part and export performance has been robust, establishing a solid basis for resumption of positive growth in 1999 and beyond.

For 1999, the new Administration has outlined plans to reduce the budget deficit from this year's anticipated P 40 billion (1.4 percent of GDP) to only P 18 billion or 0.6 percent of GDP. These plans assume real GDP growth of 3.45 percent, inflation in the 8 to 9 percent range and short-term interest rates at 16 percent (Treasury Bill rate). As well, the budget assumes implementation of tax measures to improve tax collection. A more manageable external position will be maintained through increased foreign exchange earnings from exports, higher foreign investments, increased overseas worker's remittances and tourism receipt, among others. Policies in 1998 will, however, focus on the restoration of business and investor confidence.

Philippines Policy Framework and Adjustments: Response to the Regional Economic and Financial Crisis

Monetary/Financial Policy

- The Philippines Sentral ng Pilipinas (BSP), the Philippines central monetary authority, has adjusted its key overnight interest rates and gradually raised liquidity reserves.
- The Monetary Board adopted the following measures on January 21, 1998 to effect a reduction in bank lending rates:
  a) Opening of a 30-day lending window;
  b) Opening of a swap window for banks without government securities (GS) holding; and
  c) Outright purchase by the BSP of government securities at market rates.
- Banks were required to observe loan ceilings and exposure limits as follows:
  d) single borrower limit of 25 percent of a bank's unimpaired capital; and
  e) Ceilings on equity investments that vary across types of banks.

Fiscal policy

- Fiscal policy was directed towards improving the efficiency of revenue collection and the tax system, maintaining prudence in government spending, improving the government's financial management system, and further rationalizing the government corporate sector.
- Fiscal policy was likewise focused on reducing and reviewing financial subsidies, reducing the budget deficit, improving the quality of pubic investment through careful selection of projects and strictly carrying out the Tax Reform Act introduced in December 1997.

Exchange Rate

- On July 11, 1997, the BSP allowed the peso-dollar rate to move within a wider band to facilitate more timely adjustment in light of the more difficult conditions in regional currency markets. It also intensified dollar sales and adjusted upwards its key overnight interest rates.
- New banking regulations were implemented to rationalize foreign exchange trading.
- Tightening the overbought position and relaxing the oversold position of banks.
- A new volatility band was initiated and implemented by the BSP on 7 October 1997 in an attempt to stabilize the foreign exchange market.
- Foreign exchange rules were further liberalized to encourage overseas Filipino workers and investors to remit dollar earnings through the banking system;

Corporate Governance

- As part of its full disclosure policy, the Securities and Exchange Commission is requiring all publicly listed firms to include a summary of the effects of the peso depreciation and the current economic crisis as part of their regular financial report to the Commission.

Philippines: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	53.0	54.4	64.1	74.1	82.8	83.21
Real GDP	0.3	2.1	4.4	4.8	5.8	5.2
Total Consumption	n/a	n/a	n/a	n/a	n/a	n/a
• Private Consumption	3.3	3.0	3.7	3.8	4.6	5.0
• Government Consumption	-0.9	6.2	6.1	5.6	4.1	1.6
Total Investment	n/a	n/a	n/a	n/a	n/a	N/a
• Private Investment	n/a	n/a	n/a	n/a	n/a	N/a
• Government Investment	n/a	n/a	n/a	n/a	n/a	N/a
Exports	4.3	6.2	19.8	12.0	15.4	8.9
Imports	8.7	11.5	14.5	16.0	16.7	8.7
Fiscal and External Balances (% of GDP)						
Budget Balance	-1.2	-1.5	1.0	0.6	0.3	0.1
Merchandise Trade Balance (f.o.b.)	-8.9	-11.4	-12.3	-12.1	-13.7	-13.5
Current Account Balance	-1.6	-5.5	-4.6	-4.4	-4.8	-5.2
Capital Account Balance	3.5	5.2	7.1	4.6	13.4	7.9
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	7.9	6.8	10.0	7.5	9.0	6.2
CPI	8.9	7.6	9.0	8.1	8.4	5.1
M2	11.0	24.6	26.8	25.2	15.8	20.5
Short-term Interest Rate (%)	16.1	12.2	13.6	11.4	12.4	13.1
Exchange Rate (Peso/US$)	25.5	27.1	26.4	25.7	26.2	29.5
Unemployment Rate (%)	9.8	9.3	9.5	9.5	8.6	8.7
Population (millions)	65.3	66.9	68.6	70.3	71.9	71.5

Source: Data are as submitted by member economies, unless otherwise specified.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	1.0	-0.6	1.3	2.4	1.8	4.5	n/a	4.6	4.0	4.0
Real Exports	3.0	n/a	20.9	21.0	n/a	9.9	n/a	18.7	21.0	n/a
Real Imports	2.8	n/a	10.4	9.0	n/a	10.1	n/a	14.2	10.0	n/a
CPI	9.25-9.75	10.0	8.9	10.0	10.2	6.7	n/a	7.0	8.0	6.0

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998). The LINK forecast is from the World Outlook (Project LINK, September 1,1998); figures for the period 1999-2001 refer to 1999 only. The ADB forecast is from the Asian Development Outlook 1998; figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

RUSSIAN FEDERATION

In 1997, Russia made significant progress towards stabilizing its economy. Real growth turned positive for the first time in this decade, industrial production and retail trade turnover increased, the real cash earnings of the population grew, while unemployment declined and inflation fell to the manageable 15 percent level. The stock market finished 1997 as the world's top performer, up over 100 percent over year-end 1996 despite experiencing some contagion from the turbulence in East Asia during the last months of the year. Per capita GDP rose to approximately US$3,000 in 1997.

As well, there emerged some encouraging signs of social and economic stabilization: for the first time since the beginning of reforms, paid services provided to the population increased as compared to the previous year, while the situation with pension payments normalized.

However, a number of factors, particularly in the fiscal and payments areas, curbed the build-up of a positive dynamic and pointed to continued structural difficulties in the economy. Government budgets remained under pressure from weak tax collection and non-cash settlement prevailed as a major means of tax payment to local budgets. Expenditures for servicing domestic and foreign debt stayed high which undermined the potential for financing socially and economically desirable development. While the decrease in investment decelerated, and the second half of the year was marked by growth of industrial investment, a positive overall investment dynamic was not yet restored. The financial position of business enterprises remained precarious, with the volume of mutual non-payments and barter operations increasing.

In 1998, a number of factors, including both internal and external, influenced investor behavior and attitudes towards Russia. The most important external factors were the crises on the stock and currency markets in Southeast Asia and a serious deterioration of the price situation on the world energy market, which hurt Russia's terms of trade. These problems were compounded by domestic political and economic instability, which was reflected in the slow pace of key economic reforms, particularly on the fiscal side which resulted in weak tax revenues that limited the government's room to maneuver, and in the growing payments arrears throughout the economy that in turn contributed to labour unrest. In the eyes of the market, these developments significantly weakened Russia's fiscal and external payments position.

The stock market tumbled steeply in January 1998 and again in May, bringing shares down at one point to 40 percent of their peak 1997 value. With pressures on the ruble mounting, interest rates soared into the 150 percent range in late May 1998 before falling back to the 60 percent range shortly thereafter.

Reserves came under pressure as international lenders increasingly became unwilling to rollover debt. Meanwhile, the increased costs of refinancing the national debt accentuated the pressures on the budget. The decline in equity market values fed through to create banking system fragility, at the same time as the flow of funding to the real sector of economy dried up.

While a full-blown crisis was temporarily averted with the help of the announcement in mid-July of a US$ 22.6 billion IMF-led international support package, of which about US$ 5 billion of which was disbursed, the respite was short. The crisis of non-payments on the interbank credit market, which broke out in the second week of August, led to a sharp rise in interest rates and increased demand for foreign currency. At the same time, the stock market fell steeply again, down to 30 percent of its peak. On 17 August 1998 the government and the Bank of Russia took a set of measures aimed at adjusting the financial and budgetary policy. In particular, the Bank of Russia adopted the policy of allowing the ruble to float within the limit of the "foreign currency corridor" from 6 to 9.5 rubles for 1 USA dollar. At the same time, a 90-day moratorium on international debt repayment was imposed. On August 25, the government announced a unilateral restructuring of its short-term domestic debt. The ruble has since depreciated substantially from its pre-crisis level while trade flows have declined sharply.

The disruption to international trade engendered by the crisis comes in conjunction with a serious decline in the harvest in 1998, with key staple food yields expected to be down between one and two-fifths, in a context where Russia imported very significant shares of key foodstuffs in 1997.

As well, the crisis has led to intensification of the problems in the payments system, with a backlog of debt to be cleared, extensive unpaid wages and salaries, and uncollected taxes. In September, the government issued 900 million rubles as part of an emergency procedure to help settle some of the payments arrears.

These events have created a substantially changed short-term economic picture for Russia as well as posing a new set of stabilization issues.

GDP

In 1997, for the first time in the 1990s, a positive growth rate of GDP was recorded.[1] Real GDP increased by 0.9 percent, following the decline of 5 percent in 1996.[2]

Growth of **consumption** was the main factor behind the turnaround to positive GDP growth. Final consumption expenditures increased by 1.8 percent in 1997, including 2.4 percent in the household sector and 0.5 percent by public institutions. Gross savings increased by only 0.6 percent and fell as a share of GDP to 22.6 percent of GDP in 1997 (1996: 23.0 percent).

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[1] Some research on the size of the underground economy suggests that, while the official figures indicate that Russia's economy only started to grow again in 1997, the turnaround may have been as early as 1994 when the underground economy started to surge. This research also suggests that per capita GDP may be double the officially measured level.

[2] Source: IMF, World Economic Outlook, September 1998. The growth figure for 1997 has been updated from a previous estimate of 0.8 percent.

Nominal **exports** decreased in 1997 in comparison with the 1996 level while imports continued to grow. Accordingly, net exports dropped from US$ 16.7 billion in 1996 to US$ 11.5 billion in 1997. The net export share of GDP shrank to 2.7 percent in 1997 from 4.0 percent in 1996.

In the first half of 1998, GDP has fallen back again, decreasing by 1.1 percent as compared to the corresponding year-earlier period. While consumer demand for goods strengthened marginally (trade turnover volume increased by 3.3 percent in comparison with the corresponding period of the previous year), investment activity fell by 5.5 percent from its year-earlier level. By August, real GDP was down 8.2 percent over the year-earlier period.

INFLATION

In 1997, the decline in consumer inflation to 14.6 percent on an annual average basis from 47.6 percent a year earlier was a major step forward in attaining price stability. Producer price growth also slowed by a comparable amount, to 14.7 percent from 51.2 percent a year earlier.

In terms of inflation during the year (December-over-December), the slowdown was to 21.8 percent in 1996 and further to only 11.0 percent in 1997. The trend towards lower growth of consumer prices in 1997 was most pronounced on the food market where prices grew by only 9.1 per cent against 17.7 per cent in 1996. Other goods prices rose by 8.1 percent while the index for consumer services rose 22.5 per cent in 1997.

During January-July 1998, the pace of inflation slowed even more, with cumulative CPI growth over the period declining to only 4.2 percent, compared to 9.6 percent in the year-earlier period. The slowdown in inflation in the first half of 1998 was due to a strict monetary policy adopted as a result of the deepening financial crisis. During this period producer prices of industrial goods barely increased at all, edging up only 0.3 percent over their year-end 1997 level.

Inflation dynamics have, however, changed completely since the crisis. After falling to 0.2 percent in July, the month-over-month inflation rate jumped to 15 percent in August and to 38.4 percent in September, bringing cumulative inflation since the beginning of the year to 65.8 percent.

EMPLOYMENT

Employment in the Russian Federation in 1997 decreased to 64.5 million at the end of 1997, down by 0.9 million or by 1 percent from year-end 1996. The decline was primarily due to the reduction of the number of employees in large and medium-scale industrial enterprises. By the end of December 1997, 88.7 percent of the active population were in full employment.

In terms of registered unemployment, the number of officially registered unemployed persons declined to 2 million at the end of 1997 from 2.5 million at year-end 1996. The decline in the **registered unemployment rate** was from 3.43 to 2.75 percent. Both the number of unemployed and the registered unemployment rate fell in the overwhelming majority of the constituent entities of the Russian Federation.

At the same time the total number of people classified as **unemployed** in accordance with the **ILO methodology** increased to 8.18 million by the end of 1997 from 7.28 million at the end of 1996. The unemployment rate measured on this basis rose to 11.3 percent in 1997 from 10.3 percent in 1996.

During the first 7 months of 1998, these trends continued. The number of officially registered unemployed declined to 1.77 million people while the officially registered unemployment reached 2.43 percent of the active population. By contrast, there was some increase of unemployment as per the ILO methodology to over 8.3 million people or 11.5 percent of the active population. Since the onset of the crisis, the difficult liquidity situation faced by the corporate sector has led to layoffs, suggesting that the unemployment rate will rise over the second half of the year.

FOREIGN TRADE

In 1997, total trade turnover amounted to US$ 160.8 billion, an increase of 2.3 percent over 1996. Merchandise exports reached US$ 88.2 billion, a decline of 1.5 percent while imports rose to US$ 72.6 billion, up 7 percent over 1996. The trade balance declined to US$ 15.6 billion in 1997 from US$ 21.4 billion in 1996.

In the first half of 1998, total trade contracted to US$ 71.7 billion, down 3.6 percent from the corresponding year-earlier period. This reflected a slide in exports of 13 percent to US$ 36.1 billion while imports rose 8.4 percent to US$ 35.6 billion. The first half merchandise trade balance thus shrank to only US$ 0.5 billion.

The decline in the aggregate value of exports in 1997 (by 1.5 percent) and in the first half of 1998 (13 percent) was due primarily to the deterioration of global market conditions for a number of major Russian exports (oil and oil products and metals in particular), including in terms of price (most importantly the unprecedented fall of world oil prices), the decline of business activity in a number of key markets caused by the growing world financial crisis, and market access difficulties.

In terms of **commodity structure**, Russian exports in the first half of 1998 were dominated by fuel and energy goods (43 percent of the total volume of Russian exports) and ferrous and non-ferrous metals (17 percent).

FOREIGN INVESTMENT

In 1997, Russia attracted US$ 10.5 billion worth of foreign investment, which was almost twice as much as the inflow in 1996. Moreover, direct foreign investment almost doubled and amounted to US$ 3.9 billion dollars.

In the first half of 1998, US$ 7.7 billion worth of foreign investment flowed into Russia, including direct foreign investment of US$1.51 billion. Germany, USA and France are the most active investors in Russia, accounting for some 61.4 percent of accumulated investment, including 64.6 percent of the inflows in the first half of 1998. The most attractive regions for foreign investors are the cities of Moscow and St. Petersburg, the Republic of Tatarstan, as well as the regions (oblasts) of Moscow, Omsk and Tumen, which together account for over 76 percent of the aggregate investment volume in Russia, including 81.7 percent of the investment volume for the first half of 1998.

FISCAL POLICY

In 1997, fiscal outcomes were influenced by, and fiscal policy aimed at overcoming, several structural problems, including low levels of fixed capital investment; inadequate discipline in the area of payments, contract implementation and tax collection; the existence of a large number of non-viable enterprises; a heavy debt burden; and substantial external debt servicing costs.

Fiscal measures were taken to alleviate the tax burden in parallel with others to improve tax collection and eliminate tax evasion, to reduce tax benefits and their orientation to the stimulation of investments, to strengthen financial discipline, and to accelerate state expenditure adjustment. The strained personnel situation in the public sector continued to aggravate the problems of drawing up the budget as well as of collecting taxes.

Consolidated budgetary **revenue** in 1997 amounted to 705.5 billion rubles, up 119.1 billion rubles or 20.3 percent over 1996. Tax revenues in cash grew as the volume of tax offsets and deductions considerably decreased. Consolidated budgetary **expenditures** in 1997 amounted to 905.8 billion rubles, up 143.3 billion rubles (18.8 percent) over the previous year. The level of social expenditure was higher than in 1996 due to the payment of salary arrears in the public sector and of pension arrears. In general, the level of state financial obligations continued to be excessive. The consolidated **budget deficit** in 1997 amounted to 7.7 percent of GDP, down from 8 percent in 1996.

In the first half of 1998, the consolidated budgetary revenues amounted to 274.5 billion rubles or 23.2 percent of GDP, while consolidated budgetary expenditures amounted to 331.7 billion rubles or 28 percent of GDP. The cumulated budget deficit over this period was 57.2 billion rubles or 4.8 percent of GDP.

MONETARY POLICY

During most of 1997, Russian interest rates moved lower, continuing the general trend since mid-1996. During June-October 1997, the annualized yield on state 90-day obligations fell to 17-19 percent, down from 25-31 percent at the start of the year. However, at the end of October 1997, the situation drastically changed. The withdrawal of investors from the Russian securities market led to a sharp decline in equity values as well as to mounting pressures on the foreign exchange market. This turn of events prompted a sharp increase in interest rates, sending the yield on short-term state obligations on the secondary market to about 60 percent by the end of July 1998.

As regards the exchange rate, over the period January-July 1998, the external value of the ruble decreased by 5.0 percent (on the official exchange by 4.7 percent). As pressure on the ruble grew in mid-year, the tightening of monetary policy by the Bank of Russia limited the scope for speculative operations on the currency market and helped to maintain relative stability of the ruble until mid-August 1998. Following the adoption of the floating rate policy, the ruble has traded at significantly lower values, and settled, after some fluctuations, in the range of 15 to the dollar in the first weeks of the fourth quarter.

MEDIUM-TERM OUTLOOK

The prognosis for 1998 and 1999 is subject to considerable uncertainty. World market conditions for major Russian exports remain difficult. The domestic fiscal and payments problems have been compounded by the financial crisis. Inflation has accelerated sharply, undermining confidence. Investment activity is retrenching.

As regards annual growth in 1998, the decline in GDP is expected to be larger in the second half of 1998 than in the first half. Estimates of the likely extent of the decrease vary. The IMF has forecast a decline of 6 percent in its most recent outlook.

As regards inflation, on an annual average basis, the IMF forecasts an inflation rate for 1998 of 48 percent. However, the steep rise during the course of this year establishes a high base for 1999, which will lead to a substantially higher inflation rate in 1999 on an annual average basis, even with successful stabilization in the coming months.

In the medium term, the economic situation will depend on the pace and extent of removing the consequences of the budgetary and financial crisis that struck the Russian economy in 1998 as well as on the changes in the situation in the global market. As a result of the re-emergence of rapid inflation and the payments crisis, confidence in the currency will be reduced. Unemployment is set to increase in the short term, both as a reflection of structural reforms and of the disruption to economic activity caused by the crisis. The deepening of the downturn in the second half of 1998 leaves unclear the timing of a possible turnaround in economic activity.

Russia: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	99	184	277	348	429	450
Real GDP	-14.5	-8.7	-12.7	-4.1	-5.0	0.9
Total Consumption	-5.2	-1	-3.1	-2.7	-2.1	1.8
• Private Consumption	-3	1.2	1.2	-2.8	-3.1	2.4
• Government Consumption	-11.8	-6.4	-2.9	1.1	0.2	0.5
Gross Saving	-36.9	-29.4	-31.2	10.8	-17.7	0.6
Fiscal and External Balances (% of GDP)						
Budget Balance [3]	n/a	n/a	n/a	-5.0	-8.0	-7.7
Merchandise Trade Balance (f.o.b.)	n/a	8.5	6.4	6.0	5.4	3.8
Current Account Balance	n/a	6.9	3.4	3.3	2.8	0.65
Capital Account Balance	n/a	-0.15	0.74	-0.1	-0.1	-0.18
Economic Indicators (% change from previous year, except as noted)						
CPI	n/a	874.6	307.4	197.4	47.6	14.6
M2 (billions of rubles, end of period) [2]	n/a	33.2	97.8	220.8	295.2	370.2
Short-term Interest Rate [3] (%)	n/a	n/a	n/a	168.0	85.8	26.0
Exchange Rate (Ruble/US$)	0.192	0.932	2.204	4.554	5.124	5.785
Unemployment Rate (%)	0.76	1.11	2.21	3.15	3.43	2.75
Population (millions)	148.3	148.0	147.9	147.6	147.1	146.4

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Budget balance refers to consolidated budget. (2) Excluding foreign currency deposits. (3) Short-term interest rate is the Treasury Bill Rate from the IMF, International Financial Statistics.

Forecasting Summary (% change from previous year)

	1998				1999-2001			
	Official	IMF	LINK	OECD	Official	IMF	LINK	OECD
Real GDP	n/a	-6	-3.7[3]	2.0	n/a	n/a	-1.6	4.0
Real Exports	n/a	n/a	-7.8	n/a	n/a	n/a	0.5	n/a
Real Imports	n/a	n/a	5.9	n/a	n/a	n/a	-2.2	n/a
CPI	n/a	48	n/a	10.0	n/a	n/a	n/a	10.0

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998); figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, September 1, 1998); figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

[3] LINK projection for 1998 is GNP figure.

REPUBLIC OF SINGAPORE

Despite the regional financial turmoil in the second half of the year, the Singapore economy managed to sustain a healthy growth performance in 1997 as the impact from the crisis on the real economy was lagged. However, entering into 1998, the regional economic slowdown has begun to bite as the effects of the external slowdown filter through the domestic economy.

GDP

Real GDP growth momentum was uneven during 1997 as a result of two forces, namely the pick-up in global electronics demand and the regional economic downturn. After a slow start in the first quarter, the economy saw an acceleration in output on the back of the recovering manufacturing sector, coupled with beneficial spin-off effects on hub-related services, in the following two quarters of the year. In the last quarter, however, the impact of the regional slowdown began to filter through to segments with a high reliance on regional demand, resulting in an overall deceleration of growth momentum. Helped by the diversified nature of the economy, industries servicing markets in the developed economies were less affected, thereby providing some support to overall growth. Real GDP growth in 1997 as a whole was a healthy 7.8 percent, higher than the rate of 6.9 percent registered in 1996.

External demand continued to be the primary growth engine, expanding by 7 percent in 1997. There was some moderation in merchandise export growth but services exports picked up on the back of faster growth in freight shipments, port services and passenger fares.

Total domestic demand rose by 9.9 percent in 1997, a shade lower than the 11 percent recorded a year earlier. Growth in total **consumption** expenditure slowed both in the public and private sectors. **Investment** expenditure expanded by 8.9 percent in 1997, sharply down from the 17 percent in 1996. This was largely due to slower growth of spending on both construction and works, and transport equipment.

In terms of **sectors**, except for construction and commerce, all sectors grew faster in 1997 than in the preceding year. Manufacturing expanded by 4.3 percent in 1997, supported by strong capacity expansion in the chemicals industry and a recovery in the semiconductor industry. The electronics industry was, however, affected by excess capacity in the disk drive segment and negative growth in the personal computer segment.

The **financial and business** sector turned in a strong performance, with growth of 11 percent in 1997. Within financial services, robust offshore credit expansion and volatility in foreign exchange and stock markets throughout most of the year supported growth. Business services growth was also healthy, but was affected by poor sentiments in real estate services.

The **transport and communications** sector expanded by 9.2 percent, up from 8.1 percent in 1996. The volume of air and sea cargo handled, and total container throughput remained healthy. Activity in the communications sub-sector was supported by healthy growth in the domestic economy.

The strong expansion of the **construction** sector moderated in 1997, reflecting slower growth in contracts awarded over the last 1-2 years. However, it continued to turn in the strongest performance among the sectors, expanding by a robust 13 percent. Growth was underpinned by strong public-sector demand in 1997. Private construction activity was also healthy, benefiting from the stream of properties launched prior to the May 1996 property curbs.

The **commerce** sector expanded by a moderately healthy 5.8 percent, helped by growth in intra-firm trade in intermediate goods and strong retail demand in the earlier part of the year. However, reflecting its high degree of regional exposure, this sector was affected by a drop in retail trade volume and a sharp decline in visitor arrivals in the last quarter of the year.

In the first half of 1998, real GDP was 3.8 percent higher than in the corresponding year earlier period, including by 6.1 percent in the first quarter (which was aided by a low base a year earlier when the economy was bottoming out of the electronics - induced slowdown) and 1.6 percent in the second. Growth momentum had already started to slow however as is seen from the seasonally adjusted quarter-over-quarter growth figures. On this basis, real GDP growth slowed to 0.3 percent in the first quarter and contracted by 1.7 percent in the second quarter as adverse developments in the global electronics industry compounded the regional drag on services exports.

All sectors showed weaker year-on-year growth in the second quarter of 1998, as compared to the preceding quarter. **Manufacturing** output shrank by 1.1 percent, down from 6.1 percent in the first quarter. Despite healthy growth in North America and the European Union, the electronics segment was hit by a worsening industry supply-demand imbalance, sharp price erosion and intense competition.

The **construction** sector turned in a healthy 9.8 percent in the second quarter, largely in residential building activity and civil engineering work. Growth was however down from 14 percent in the first quarter.

The **commerce** sector saw a significant slowing in growth momentum, registering a third consecutive quarter of quarter-on-quarter decline. Year-on-year growth in the second quarter dipped to negative 4.8 percent, sharply lower than the positive 1.4 percent registered in the preceding quarter. Reflecting the sharp fall-off in regional activity, entrepot trade shrank by 13 percent in the second quarter. Visitor arrivals also continued to shrink, falling by 14 percent in the same period.

Growth in the **financial and business services** sector moderated to 2.5 percent, down from 6.6 percent a quarter ago. This largely reflected a slump in ACU lending and foreign exchange transactions. Overall loans growth remained positive but moderated across most segments. Stock market activity was healthy but his largely reflected selling pressures arising from a slew of unfavorable regional news, including the weakness of the yen, as well as weak performance in the domestic corporate sector. Growth in real estate services has also slowed due to the cooling property market while a number of professional services have been affected by the regional slowdown.

Growth in **transport and communications** moderated to 5.4 percent in the second quarter, lower than the 6.4 percent in the first quarter. Total sea cargo handled in terms of tonnage shrank by 9.8 percent, worse than the 2.7 percent decline seen in the previous quarter. The volume of air cargo and the number of air passengers also saw declines.

Looking ahead for the rest of 1998, GDP growth is expected to slow further on a year-over-year basis as the full impact of the regional economic downturn sets in. The Composite Leading Index which leads economic activity by about 3 quarters has continued to fall since the fourth quarter of 1997. The latest survey of business expectations in June 1998 also showed that the outlook for most sectors has deteriorated, especially the commerce and services sectors which are comparatively more exposed to the region.

Trade figures confirm the slowdown in the economy. Non-oil domestic exports fell sharply from year-over-year growth of 11 percent in the first quarter of 1998 to a marginal 0.2 percent decline in the second quarter. Non-oil imports, a short-term leading indicator of industrial activity, shrank by 12 percent in the second quarter of 1998.

Overall, **real GDP** growth is expected by the authorities to slow to between 0.5 and 1.5 percent in 1998. The IMF's most recent world outlook forecasts zero growth in 1998.

INFLATION

The Consumer Price Index (CPI) rose by a modest 2 percent in 1997, compared to 1.4 percent in 1996. Price increases were largely domestically generated, due to higher prices of transport, private medical fees and administrative charges.

Inflationary pressures continued to trend down in the first half of 1998 as weaker consumer sentiment resulted in downward price pressures. Continued keen retail competition also helped to cap price increases. The CPI for the first quarter was up by a marginal 1.1 percent over the year-earlier period, down from 2.3 percent in the fourth quarter of 1997. In the second quarter of this year, the rate of CPI growth decelerated to a minimal 0.3 percent. The bulk of price increases were in housing costs, food prices, education and health care costs.

EMPLOYMENT

The labour market remained tight in 1997. The unemployment rate in the year averaged 1.8 percent, lower than the 2.0 percent in 1996. Total employment grew by 122,800, significantly higher than the increase of 102,600 for 1996. The bulk of the increase came from the construction, financial and business services and commerce sectors.

In line with the slowing economy, the labour market eased further in the first half of 1998. The seasonally adjusted unemployment rate edged up to 2.3 percent in June 1998 from 2.2 percent in March 1998. Total employment in the second quarter declined by 5,863 or 0.3 percent. This was the first quarterly decline since the last economic recession. Manufacturing employment declined by 8,011 but the services and construction sectors continued to see net employment gains.

Wage costs continued to rise in 1997 and the first half of 1998. Nominal and real wages grew faster than productivity in 1997. Productivity growth recovered from a slow advance of 0.6 percent in 1996 to expand by 1.6 percent in 1997. In contrast, nominal average monthly earnings in the overall economy grew by 5.7 percent, while real average monthly earnings grew by 4.3 percent in 1997. As a result, the Unit Labour Cost (ULC) index for the overall economy increased by 1.1 percent in 1997.

In the second quarter of 1998, the ULC of the overall economy rose by 4 percent, up from 1.6 percent in the preceding quarter. The Unit Business Cost (UBC) index of the manufacturing sector increased by 2.7 percent in the second quarter, reversing the decline in the past 4 quarters. This was due mainly to an increase in the ULC index, which accounted for about 49 percent of the UBC.

BALANCE OF PAYMENTS

The volume of trade expanded by 7.4 percent in 1997, marginally higher than the 7.2 percent growth in 1996. In value terms, trade grew by a robust 5.7 percent in 1997, mainly due to an electronics recovery in the second half of 1997. Export volume expanded by 6.8 percent while import volume increased by 8.1 percent. The adverse impact of the regional currency crisis was somewhat mitigated by Singapore's diversified links with the developed markets, especially the U.S. and E.U., which continued to enjoy firm growth in this period.

However, with the effects of the regional slowdown and signs of moderation in electronics demand, Singapore's trade growth started to moderate in the first half of 1998. Total trade volume was still up by 3.4 percent in the first quarter over the year-earlier period but dipped sharply to –7.9 percent in the second quarter. Export volume expanded by just 2.6 percent in the first half of the year, lower than the 4.9 percent registered for the whole of 1997. Import volume fell sharply, contracting by 7.7 percent during this period.

The U.S., Malaysia and the E.U., along with Hong Kong, China and Japan were Singapore's top 5 export markets in 1997, accounting for 18 percent, 17 percent, 14 percent, 9.6 percent and 7.1 percent of total exports respectively. These economies were also the top 5 markets for non-oil domestic exports; in the order of the U.S. (29 percent), E.U. (19 percent), Malaysia (13 percent), Japan (7.6 percent) and Hong Kong, China (6.5 percent).

The balance of payments surplus rose to US$8 billion in 1997, up from US$7.4 billion in 1996, reflecting improvements in the non-oil trade balance and net services exports. The current account surplus amounted to US$14.8 billion in 1997, about 15.4 percent of GDP.

INVESTMENT

Manufacturing investment commitments in 1997 increased to S$8.5 billion. The bulk was committed in projects in the electronics and chemicals cluster. When operational, these investment commitments are expected to generate S$6.3 billion in value added and about 18,000 jobs. Almost 70 percent of commitments originated from foreign sources, with the U.S. retaining its lead at S$2.4 billion.

In the first half of 1998, manufacturing investment commitments reached S$3.9 billion. Foreign commitments continued to dominate, with the U.S contributing the largest share, followed by Japan and Europe. The bulk of U.S. investments were committed in new and expansion projects in the electronics and chemical industries.

For the services sector, total business spending commitments amounted to S$1.9 billion in 1997 and S$723 million in the first half of 1998, with more than half of the commitments originating from foreign investors.

FISCAL POLICY

The adherence to prudent budgetary policies ensured that both operating and development expenditures in 1997 were funded within operating revenues. The bulk of expenditure in 1997 was allocated to social security and community services (31 percent), comprising mainly education and health, and maintaining security (30 percent).

Total fiscal revenue in 1997 amounted to S$30.6 bullion (21 percent of GD), up by S$2.6 billion or 9.3 percent over 1996. Total expenditures in 1997 amounted to S$25.9 billion (18 percent of GDP), an increase of S$6.7 billion or 35 percent over 1996. The result was a fiscal surplus of S$4.7 billion, half the level of the 1996 surplus of S$8.9 billion.

In 1998, the government expects a deficit of S$ 800 million, reflecting lower revenues due to the economic slowdown and an announced S$ 2 billion mid-year budget package to soften the impact of the crisis on the economy. Capital expenditure, particularly in the key areas of education, economic infrastructure and defence are to continue to increase in order to invest for the long-term. The outlook for 1999 is also for a modest budget deficit.

MONETARY POLICY

Monetary policy remained focused on the pursuit of price stability. In 1997, a generally benign inflation environment and healthy economic growth allowed for a moderate monetary policy stance. The broad monetary aggregates expanded at a slightly faster pace in 1997, on the strength of the pick-up in the economy. M2 and M3 both grew by 10 percent in 1997, compared to 9.8 percent and 8.5 percent respectively in 1996. In contrast, growth of narrow money (M1) fell to 1.6 percent in 1997, down from 6.7 percent in 1996. This reflected a shift of funds into fixed deposits as domestic interest rates rose amidst the regional financial turmoil.

Against a trade-weighted basket of currencies of its major trading partners, the Singapore dollar remained relatively stable over the course of 1997, while depreciating against the US dollar, although to a lesser extent than most regional partners. The Singapore dollar finished 1997 trading at 1.68 to the US dollar, down from 1.40 at year-end 1996. However, overall monetary conditions tightened progressively over the second half of the year due to the impact of the regional crisis. In particular, the money market interest rate rose sharply to average 9 percent in December 1997 and January 1998 (including a peak of 10.05 percent at one point in January) during the height of the market pressures on Asian currencies.

In 1998, the Singapore dollar has traded over a comparatively wide range against the US dollar, reflecting the unsettled state of international currency markets during the year. Monthly averages have ranged from a low of 1.75 in January to a high of 1.60 in April; the average over the first three quarters was 1.68, about 13 percent below its annual average in 1996. In the first weeks of the fourth quarter, the Singapore dollar has strengthened against the US dollar.

MEDIUM-TERM OUTLOOK

In the medium term, Singapore's growth performance will be affected by a balance of two sets of opposing forces. On the positive side, growth in the developed economies like the U.S. and E.U. is expected to provide some underlying support to the export sector. As well, foreign investment should also remain reasonably strong given the relatively stable performance of the Singapore dollar during the period of currency turmoil.

On the negative side, the services sectors, which have a strong regional or domestic orientation, face a period of painful consolidation. Cargo loads and passenger arrivals in the sea and air ports have fallen. The retail and leisure industries have also seen sharp corrections in business activity. As regards foreign investment inflows, the reduced appetite of investors for emerging market risk will affect Southeast Asia in general for at least the near term, which will have some implications for Singapore as well.

Singapore's medium-term growth prospects will hinge heavily on how quickly the regional economies resolve their structural economic problems. Most multinational enterprises and foreign investors view investments in Singapore in the wider context of their regional business strategy. They site regional headquarters (RHQs) and produce in Singapore to co-ordinate their regional operations and to serve the regional markets. If the region is able to maintain stability and implement the necessary reform measures successfully, confidence will gradually return and the region will rebound.

Singapore: Measures to address the regional financial crisis

- After the financial crisis, the trade-weighted exchange rate was allowed to fluctuate within a wider range;
- The benchmark 1-month inter-bank rose significantly from 3.86 percent in July 1997 to 10.05 percent in January 1998, but has since fallen to about 5 percent recently.
- Fiscal policies predicated on the following principles:
  1) Maintain healthy balanced budget in the long-term, while supporting growth in the near term with modest deficits.
  2) Maintain an internationally competitive tax structure.
  3) Promote healthy investments and growth through selective use of tax incentives.
  4) Maintain strict control on Government spending.
- After the crisis, investment tends to be cautious due to tighter liquidity and higher interest rates, overseas investment transferred to some strategic field and regions with sound financial system;
- Stressing on prudential and transparent guidelines. After the crisis, banks have put much emphasis on the information disclosure, Singapore's standard of banking disclosure is under drafting.

Singapore: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	49.7	58.4	70.9	85.2	92.7	96.3
Real GDP	6.2	10.4	10.5	8.7	6.9	7.8
Total Consumption	n/a	n/a	n/a	n/a	n/a	n/a
• Private Consumption	6.8	10.8	7.3	4.8	7.2	6.7
• Government Consumption	7.3	1.0	3.8	10.7	23.5	8.1
Total Investment	n/a	n/a	n/a	n/a	n/a	n/a
• Private Investment	14.5	11.1	5.5	12.2	20.5	6.6
• Government Investment	1.9	7.6	22.7	1.3	4.0	19.3
Merchandise Exports	1.4	15.6	23.3	13.7	5.2	5.3
Merchandise Imports	2.9	17.1	13.7	12.7	5.0	6.2
Fiscal and External Balances (% of GDP)						
Budget Balance	4.9	5.9	7.4	6.1	5.9	3.4
Merchandise Trade Balance (f.o.b.)	-3.7	-4.7	1.9	1.1	2.4	1.2
Current Account Balance	12.0	7.3	16.2	16.9	15.9	15.4
Capital Account Balance	n/a	n/a	n/a	n/a	n/a	n/a
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	1.0	5.5	3.8	2.6	1.4	1.4
CPI	2.3	2.3	3.1	1.7	1.4	2.0
M2	8.2	10.9	15.9	10.1	8.5	10.3
Short-term Interest Rate [1] (%)	2.46	2.26	3.62	3.41	3.41	4.1
Exchange Rate (S$/US$)	1.63	1.62	1.53	1.42	1.41	1.48
Unemployment Rate (%)	2.0	1.9	2.0	2.0	2.0	1.8
Population (millions)	3.2	3.3	3.4	3.5	3.6	3.7

Source: Data are as submitted by member economies, unless otherwise specified.
Note: Short-term interest rate is the 3-month fixed deposit rate.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	0.5-1.5	0	1.2[1]	3.0	3.2	n/a	0.2	2.4	4.5	5.2
Real Exports	n/a	n/a	-7.7	2.0	n/a	n/a	n/a	3.4	4.0	n/a
Real Imports	n/a	n/a	-7.8	2.0	n/a	n/a	n/a	3.4	4.0	n/a
CPI	n/a	1.8	n/a	3.2	2.5	n/a	2.0	n/a	3.3	2.5

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998). The LINK forecast is from the World Outlook (Project LINK, September 1,1998); figures for the period 1999-2001 refer to 1999 only. The ADB forecast is from the Asian Development Outlook 1998; figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

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[1] LINK projection for 1998 is GNP figure.

CHINESE TAIPEI

In 1997, Chinese Taipei maintained high growth with low inflation, successfully withstanding the negative impacts to its agricultural sector in the second quarter in the form of an outbreak of foot-and-mouth disease and the more general impact of the Asian financial turmoil in the fourth quarter. Growth was mainly due to significant increases in private consumption and investment.

GDP

Real GDP grew by 6.8 percent in 1997, the highest rate since 1992 and exceeding the 6.7 percent projection made at the beginning of the year. Although the trade surplus declined, strong performance in the service sectors and in industrial production, driven by increases in private consumption and investment, helped prop up 1997 GDP growth.

On the production side the strongest boost came from 6.7 percent growth in the manufacturing sector and 14.0 percent growth in the real estate, insurance and financial sectors, which contributed 2.0 and 2.6 percentage points respectively to GDP growth. On the demand side, the main impetus to growth came from the increase in consumer spending and the vigorous growth in business investment. In particular, the growth in private fixed investment hit a five-year high of 15.6 percent, thanks to a 34.8 percent spurt in transport equipment investment and a 21.4 percent increase in machinery and equipment investment.

Chinese Taipei maintained solid growth in the first half of 1998 at 5.6 percent including year-over-year gains of 5.9 percent in the first quarter and 5.2 percent in the second. For the year as a whole, the Asian financial turmoil is expected to cause a decline in exports to major trading partners in the region, prompting a downward revision of the real GDP growth forecast to 5.3 percent, the lowest since 1986. By comparison, the IMF has lowered its forecast for Chinese Taipei to 4 percent for 1998.

In order to maintain the soundness of the economy, the government has launched an action plan to expand domestic demand by expediting public construction and promoting private investment. The amount of additional investment in infrastructure is estimated to be US$ 4.90 billion (NT$ 161.3 billion) in the next two years. The deregulation of the telecommunication market and the initiation of the whole Saturday off every other week in the beginning of 1998 is expected to help spur private investment and consumption respectively. Consequently, domestic demand is expected to continue to play a major role in stimulating economic growth. Industrial restructuring is expected to continue in favour of the development of high-tech industry.

INFLATION

The **CPI** growth rate fell to a ten-year low of 0.9 percent in 1997. Prices were stable throughout the year, partly due to the decline in the world prices of raw materials, which resulted in lower levels of both import prices and wholesale prices. The fall of the price of pork due to the foot-and-mouth disease in March 1997 also contributed to the low inflation. In addition, slower increases in service costs and residential rents as well as restrained wage increases helped to alleviate the upward pressure on prices.

While the weakening of the NT dollar against the US dollar has put upward pressure on import prices and, in turn, on domestic prices in 1998, the stable trend in international price levels and moderate domestic inflation in the service sector will help to hold down the increase in general price levels. Through the first three quarters of 1998, the CPI has risen 1.3 percent over the corresponding year-earlier period (including an increase of only 0.55 percent in the third quarter on a year-over-year basis). For 1998 as a whole, the CPI is forecast by the authorities to rise by 1.9 percent; by comparison the IMF forecasts 2.0 percent CPI growth for the year.

EMPLOYMENT

The **population** of Chinese Taipei was 21.6 million in 1997. Persons in age bracket 0-14 comprised 23 percent of the total; those in the 15-64 bracket accounted for 69 percent, and the 65-and-older bracket accounted for 8 percent. The **labor force** was 9.4 million in 1997, with an overall participation rate of 58.3 percent. **Total employment** increased by 1.2 percent compared to 1996. As for sectoral employment, the agriculture sector accounted for about 9.6 percent of the total working population, while the industrial sector and the service sector accounted for 38.2 percent and 52.2 percent respectively. In line with the changing employment structure, the **unemployment rate** rose to 2.7 percent in 1997, the highest in a decade. Chinese Taipei had a stable labour market situation in the first half of 1998 with the unemployment rate averaging 2.4 percent.

CURRENT ACCOUNT

External trade continued to grow in 1997, but the trade surplus decreased as the growth of imports far outpaced that of exports. The value of exports and imports amounted to US$ 121.7 and US$ 107.3 billion in 1997, reflecting increases of 5.4 percent and 9.6 percent over the previous year respectively. The slower growth of exports was attributed to the Asian financial crisis, while the comparatively large increase in imports was attributed to several factors, including the increased demand for agricultural and industrial raw materials arising from economic recovery, and the increased demand for imported machinery and equipment.

In line with the decrease in the trade surplus from US$ 17.6 billion in 1996 to US$ 14.5 billion in 1997, the **current account** surplus decreased from US$ 11.0 billion to US$ 7.8 billion. For many years, the services account has mostly been in deficit. In 1997, this deficit decreased to US$ 7.7 billion from the US$ 8.1 billion recorded in 1996, mainly due to the increase in remittance proceeds resulting from merchandising. The surplus on the income account declined from US$ 3.2 billion in 1996 to US$ 2.4 billion in 1997, mainly due to the increase in equity securities investment income earned by foreign investors. Net payments with respect to current transfers decreased from US$ 1.7 billion in 1996 to US$ 1.3 billion in 1997, this being due to the increase in inward remittances to support relatives.

During the first half of 1998, exports to Japan, Korea, and Southeast Asia dropped significantly under the impact of the Asian financial crisis. As a result, the trade surplus decreased significantly to US$ 3.6 billion from US$ 6.8 billion in the corresponding year-earlier period. In line with these developments, the current account surplus for the first half of 1998 decreased to US$ 1.11 billion from US$ 3.1 billion in the corresponding year-earlier period.

EXCHANGE RATE

The NT$/US$ exchange rate fluctuated within a narrow range between 27.338 and 27.920 during the first half of 1997. During the second half of 1997, the NT dollar was under great pressure to depreciate following the outbreak of the Asian financial turmoil. As a result of intervention by the Central Bank in the foreign exchange market, the fluctuation in the NT$/US$ exchange rate was kept to between 28.477 and 28.752 from August to mid-October.

In mid-October, the NT dollar experienced exchange market pressures and depreciated against the US dollar from 28.518 to 30.451, or 6.35 percent, within three business days from October 16 to October 20. The NT$ was also affected by the Korean external debt crisis that emerged in mid-November, and continued to depreciate against the US dollar, falling to 32.82 on December 16, its lowest level in recent years, before rebounding slightly to 32.638 at the end of 1997, a depreciation of 15.77 percent from its year-end 1996 close of 27.491. However, over the same period, it appreciated by 6.4 percent against the Japanese yen and by 10.24 percent against the German mark.

Since the beginning of 1998, the NT dollar exchange rate has been closely linked with developments in other Asian foreign exchange markets. During the first half of the year, it first appreciated, peaking at 31.992 against the US dollar on March 4, and then depreciated, falling in the wake of developments in Indonesia and the downward trend of the Japanese yen. After hitting a low of 34.896 on June 10, which represented a depreciation of 20.29 percent from its June 30, 1997 pre-crisis value, it stabilized and did not depreciate significantly following the escalation of the crisis in Russia. As a result, over the first eight months of 1998, the NT dollar depreciated by 6.33 percent against the US dollar; however, it subsequently appreciated by 1.37 percent over the course of September to finish the third quarter at 34.372. It has strengthened further in early fourth quarter trading.

FOREIGN DIRECT INVESTMENT

As a result of the implementation of policy aimed at encouraging foreign investment, **inward FDI** amounted to US$ 4.3 billion in 1997, the highest ever recorded in a year, and a 73 percent increase on the figure for 1996. The FDI inflow came mainly from Asia (43 percent) and the Americas (31 percent). Japan was the single largest source for inward FDI, accounting for 20 percent of the total. Principal recipients of the investment were the electronic & electric appliances and basic metals & metal products industries, as well as banking & insurance and other service sectors.

On an approval basis, **outward FDI** amounted to US$ 4.5 billion in 1997. The Peoples' Republic of China, Southeast Asia and the United States were major recipients of investment from Chinese Taipei. The lion's share of this investment went into banking & insurance and electronic & electric appliances, with these two sectors accounting for 42 percent of the total outward FDI.

Since December 1990, foreign investors have been permitted to invest in the domestic securities market. The net inflow of capital amounted to US$ 9.9 billion as of June 1998, most of which came from the United States, Europe, Japan, and Hong Kong, China. In the first two quarters of 1998, on average 85 percent of foreign funds were invested in securities, representing 3.5 percent of the market capitalization. As of June 1998, the total market capitalization of the domestic stock exchange and the OTC Exchange reached US$ 276.6 billion, the second largest in Asia.

FISCAL POLICY

The recent surge of government **expenditure** has stemmed largely from the implementation of social welfare programs, pension plans, and major public infrastructure projects. **Tax revenue** growth has increased moderately on the back of economic growth, as well as being boosted by heightened activity in the securities market. Tax revenue grew from NT$ 742.5 billion in 1996 to NT$ 786.9 billion in 1997, an increase of 6 percent.

To bridge the gap between receipts and expenditures, the government has financed the current year's budget with surpluses from previous years and the issue of government bonds. As a result, the ratio of outstanding **government debt** to GDP has grown to 16.6 percent in the 1998 budget.

Measures aimed at curbing public spending include, among others, encouraging private investment in public infrastructure through Build-Operate-Transfer (BOT) and Build-Operate-Own (BOO) approaches, reducing the costs or raising the efficiency of government projects, and setting limits on the growth rate of spending at all levels of government.

MONETARY POLICY

In 1997, M2 grew at an annual rate of 8.3 percent, which was lower than the 9-14 percent target range set for the year. Major factors contributing to the slowdown of M2 growth were the increase in direct financing and the low level of inflation. With regard to monetary policy, the Central Bank raised the rediscount rate by 25 basis points in August, in order to ease depreciation pressure on the NT dollar, and to reduce the spread between the rediscount rate and the market rate. In addition, the Central Bank lowered required reserve ratios twice in the September-October period to sterilize its foreign exchange intervention, thus releasing a total of NT$ 136 billion in high-powered money into the market. The average overnight interbank call-loan rate was 6.9 percent in 1997, higher than the 5.4 percent in the previous year.

During the first eight months of 1998, the M2 growth rate averaged 8.35 percent, thus falling within the new 6-12 percent target range set for the year. The interbank call-loan rate was gradually lowered from 6.8 percent in March to about 6.5 percent in September, after the Central Bank injected liquidity into the economy through open market operations and lowered reserve requirements.

MEDIUM-TERM OUTLOOK

Chinese Taipei's medium-and long-term development agenda focuses on the quality of life, the social safety net and welfare system, links with regional neighbors, and institutional modernization. To improve economic efficiency, Chinese Taipei plans to accelerate liberalization to promote the free flow of goods, services, capital, information, and human resources. In support of the successful implementation of liberalization, the economy has committed to modernize institutions and to promote the enforcement of law. To improve growth potential, Chinese Taipei has emphasized plans to reinforce infrastructure, renew urban development and land use, and encourage science and technology development.

With respect to the longer-term view, the *private sector* is expected to expand further in view of an increasing supply of skilled manpower, a strong industrial base, expanding high-tech industry, and the implementation of liberalization policy.

Employment: Population is projected to grow more slowly, while the labor-force participation rate will become higher as part-time work is encouraged and gains acceptance by employers. Following the medium-term path of economic growth, the average growth rate of employment is expected to be 1.8 percent which is consistent with the unemployment rate staying at about 2.5 percent during 1998-2001. Given the structure of unemployment, the employment rate is unlikely to return to the low levels around 2 percent, which had until recently been maintained for a decade.

Foreign Trade: Chinese Taipei's commodity trade structure is expected to undergo considerable change, partly due to the implementation of WTO-related measures. Among exports, the importance of heavy and chemical industries will continue to grow. As domestic demand strengthens, imports of consumer and capital goods will gain in importance. In 2000, exports and imports are expected to grow, in real terms, by 6.1 percent and 5.7 percent respectively.

Chinese Taipei's Measures to Address the Financial Crisis

Monetary Policy

- A cautious monetary policy was maintained during the first half of 1997.
- The overnight inter-bank call-loan rate fluctuated between 5.56 percent and 7.21 percent; the annual growth rate of M2 fell below the lower limit of the 9-14 percent target range set for 1997.
- The Central Bank lowered required reserve ratios twice in the period September-October, 1997; in addition, the Bank continued to use open market operations as a major policy instrument in order to regulate liquidity in the financial markets.
- The M2 growth rate began to decline from November 1997, and then climbed to 8.51 percent in February 1998. Through the first eight months of 1998, it is well within the 6-12 percent target range set for 1998.
- The overnight inter-bank call-loan rate peaked at 8.11 percent in August 1997 before declining to 6.67 percent in November 1997. It remained at around 7 percent during the first quarter of 1998 and has since been lowered from 6.8 percent in March to 6.5 percent in September.

Exchange Rate

- The exchange rate between the NT dollar and US dollar remained markedly stable during the first half of 1997, fluctuating within a range of 27.4 to 27.8.
- The Central Bank allowed the NT dollar to depreciate on October 17, 1997.
- The exchange rate hit a low of 34.896 on June 10, which represented a depreciation of 20.29 percent from its June 30, 1997 value. Subsequently it stabilized and, since September, has gradually strengthened.

Fiscal and Economic Policy

- In mid-1998, given that the recovery in East Asian economies appeared unlikely to raise demand for exports soon enough, Chinese Taipei launched an action plan to expand domestic demand by expediting public construction and promoting private investment. The amount of the additional investment in infrastructure is estimated to be US$ 4.90 billion (NT$ 161.3 billion) in the next two years.

Chinese Taipei: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	212.2	222.6	241.0	260.2	272.3	283.6
Real GDP	6.8	6.3	6.5	6.0	5.7	6.8
Total Consumption	7.8	6.4	6.4	4.6	6.0	7.3
• Private Consumption	8.9	8.2	8.6	5.5	6.2	7.7
• Government Consumption	4.5	0.6	-1.2	1.3	5.2	5.4
Total Investment	13.9	8.6	5.7	5.5	2.4	8.8
Exports	5.3	4.2	5.5	12.8	7.1	9.1
Imports	12.2	8.3	3.5	9.8	5.1	14.2
Fiscal and External Balances (% of GDP)						
Budget Balance [1]	-4.6	-3.4	-2.0	-0.9	-1.2	-2.0
Merchandise Trade Balance (f.o.b.)	6.0	5.1	4.9	5.1	6.5	5.1
Current Account Balance	4.0	3.2	2.7	2.1	4.0	2.7
Capital Account Balance	-0.19	-0.15	-0.14	-0.25	-0.24	-0.11
Economic Indicators (% change from previous year, except as noted)						
GDP Deflator	3.9	3.5	1.9	1.9	2.7	1.9
CPI	4.5	2.9	4.1	3.7	3.1	0.9
M2	19.9	16.4	16.3	11.6	9.2	8.3
Short-term Interest Rate [2] (%)	7.2	6.8	6.8	6.7	5.8	6.8
Exchange Rate (NT$/US$)	25.16	26.39	26.46	26.49	27.46	28.70
Unemployment Rate (%)	1.5	1.5	1.6	1.8	2.6	2.7
Population (millions)	20.7	20.9	21.1	21.3	21.5	21.7

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Budget balance refers to budgetary revenues less expenditures; it does not include non-budgetary financial transactions. (2) The short-term interest rate refers to the 31-90 day CP rate in the secondary market.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	5.3	4.0	6.2	5.8	5.9	5.3	3.9	5.9	6.2	6.2
Real Exports	7.5	n/a	7.2	n/a	n/a	n/a	n/a	10.6	7.0	n/a
Real Imports	4.1	n/a	8.0	n/a	n/a	n/a	n/a	9.1	10.0	n/a
CPI	1.9	2.0	n/a	n/a	n/a	1.8	2.0	n/a	2.2	2.5

Note: The official forecast for 1998 is by the Directorate-General of Budget, Account and Statistics (August, 1998). The figures under 1999-2001 in the official forecast is for 1999 only and is the target set by the Council for Economic Planning and Development. The IMF forecast is from the World Economic Outlook (IMF, September 1998); figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, September 1,1998), figures for the period 1999-2001 refer to 1999 only. The ADB forecast is from the Asian Development Outlook 1998; figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

THAILAND

The crisis of confidence in Thailand's economy, which set the Asian crisis in motion, occurred against the background of financial sector exposure to an overbuilt property market,[1] a weakening equity market, a slowdown in export growth, and a deep current account deficit. The initial defence offered by the Bank of Thailand against this selling pressure (interest rate increases and direct intervention) actually pushed the baht to a 13-year high. However, with pressure on foreign exchange reserves continuing, on July 2nd, 1997, the Central Bank dropped the 13-year old pegged rate system and adopted a floating exchange rate.

The ensuing depreciation exposed numerous vulnerabilities that had developed during the preceding era of rapid growth, particularly in the banking sector. Wide-ranging structural reforms were adopted to address these as part of the IMF-led US$17.2 billion support package. Thailand has generally been acknowledged to have made good progress in implementing these reforms and has seen the baht stabilize, inflation contained, and policy-determined interest rates return to pre-crisis levels. The current account deficit has swung into a very significant surplus as export volumes have picked up strongly while imports have contracted. While the decline in economic activity in 1998 has turned out to be steeper than anticipated, the ground has been laid for a turnaround in the course of 1999 and beyond.

GDP

Real GDP contracted by 0.4 percent in 1997 following a 5.5 percent expansion in 1996. The decline, which was concentrated in the second half of the year, was most evident in private investment, which declined by 23.4 percent in 1997, compared to growth of 2.0 percent in 1996. The contraction in private sector investment was partly offset by sustained growth in government investment which was up 11.3 percent in 1997 (1996: 20.8 percent). Private consumption shrank in line with real GDP, falling by a marginal 0.4 percent (1996: +6.2 percent).

In 1998, the authorities now expect real GDP to contract about 7 percent with the anticipation of bottoming out toward the end of the year, setting the stage for a turnaround in the course of 1999. By comparison, the IMF's latest forecast projects a contraction of 8 percent in 1998.

INFLATION

The Consumer Price Index increased by 5.6 percent in 1997, with inflation moderating during the first half of the year to only 4.4 percent in line with the slower increase of

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[1] This was highlighted in the business press in the first half of 1997 due to the ongoing problems of Samprasong, one of Thailand's leading property developers and also of Finance One, the largest Thai finance company.

food prices, and accelerating to 6.8 percent in the latter half on account of the weakened currency and higher tax rates.

For the first quarter of 1998, CPI inflation increased to 9.1 percent on a year-over-year basis. This reflected a number of factors, including increases in food prices, higher import prices, and a rise in other goods prices caused by higher costs of production. CPI growth rose further to 10.7 percent on a year-over-year basis in June 1998. Reflecting the deep decline in economic activity, the CPI inflation rate is projected to decline to 8.0 percent by year-end and to average about 9 percent for the year as a whole. This is less than the 11.6 percent forecast in May 1998.

EMPLOYMENT

With the economy slowing over the course of 1997, the labour market became increasingly soft, with sharply rising layoffs in the construction, real estate and financial sectors. The unemployed workforce increased to 1.2 million in 1997, which was equivalent to an **unemployment rate** of 3.5 percent, up from 2.0 percent in 1996.

In 1998, the unemployment rate remains high owing to the persistence of overall slow economic conditions. However, the government has developed concrete measures to strengthen the social safety net and to maintain the employment-generating public works programs such as in water supply and irrigation, and has allocated an additional 0.5 percent of GDP in the 1997/98 budget for this purpose.

CURRENT ACCOUNT

The current account deficit narrowed significantly to US$ 3.0 billion or 2.0 percent of GDP in 1997 from US$ 14.4 billion or 7.9 percent of GDP in 1996. Exports rebounded due to the lower value of the *baht* since mid-1997. Meanwhile imports declined markedly in line with the contraction in domestic demand and the weakened currency.

Based on developments in the first half of 1998, the **current account surplus** is now projected by the IMF to be 10.7 percent of GDP in 1998 and 9.9 percent of GDP in 1999[2]. The main factor is the continuing compression of imports.

The capital account is expected to record a large deficit in 1998. For 1999, the capital account deficit is likely to narrow sharply due to the large stock of offshore forward and swap obligations having been settled.

EXCHANGE RATE

Following the adoption on July 2, 1997, of the **managed float exchange rate system** the *baht* depreciated substantially, to average *baht* 36.86/US$ during the second half of the year, falling from 25.79 to the US dollar at the end of the second quarter to 36.52 at

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[2] IMF, World Economic Outlook, September 1998.

the end of the third quarter and to 47.25 at year end. The decline over the second half of the year amounted to a 45.4 percent depreciation.

As with a number of other crisis-affected currencies in Asia, the *baht* came under intense selling pressure in January and closed the month at 54.92. Since then, it has recovered to trade primarily in the range of 38 to 42 to the US dollar, strengthening in the early weeks of the fourth quarter. Through the first three quarters, the baht has averaged about 42 to the US dollar, a nominal depreciation of approximately 1/3 from its annual average in 1997.

For 1998, the government's monetary policy framework under the IMF program has emphasized establishing the credibility of the framework and attaining a broad measure of exchange rate stability. Significant gains have been made in this direction, which has allowed financial sector restructuring to be implemented without disturbing monetary stability.

FISCAL POLICY

In 1997, the government recorded a fiscal deficit on a cash basis for the first time since 1988. The deficit of 1.4 percent in 1997 compares to a surplus of 1.9 percent of GDP in 1996. The year's deficit was caused by the fall in revenue collection while expenditure growth accelerated.

The overall public sector deficit target under the economic reform program for 1997/98 has been raised from 2.0 percent to 3.0 percent of GDP. This will help to offset the greater deflationary impulse from contracting private consumption and investment. Within this total, the central government deficit is projected to rise from 1.6 percent to 2.4 percent of GDP, while the state enterprise sector's deficit would expand marginally from 0.4 percent to 0.6 percent of GDP, largely as a result of the increasing expenditure programs and partly from lower earnings projected.

MONETARY POLICY

In 1997, liquidity tightened with the outflow of funds in the run-up to, and in the course of, the currency crisis. Financial institutions and commercial corporations that had foreign currency exposure were forced to purchase foreign currency to cover their position, adding to the pressure on the *baht* from the withdrawal of foreign investors. Moreover, the rise in non-performing assets on the books of the financial system made additional lending impossible, exacerbating the liquidity problems for borrowers.

In 1998, Thailand has begun to give greater prominence to interest rates with 1-3 month maturities in the repurchase market. This is aimed at providing the market with a somewhat longer-term benchmark than the overnight repurchase rate. Within the framework under the IMF program, the Bank of Thailand has prepared a monetary program as an additional guide for monetary policy, based on the latest outlook for inflation and output. At this stage, the reserve money program sets upper limits (*baht* 495 billion for reserve money for end-December 1998), rather than precise targets for reserve money and Net Domestic Assets of the Bank of Thailand. Over time, as money demand stabilizes, greater prominence will be given to quantitative targeting, and the Bank of Thailand has begun to strengthen the institutional capacity for monetary analysis and control.

FOREIGN DIRECT INVESTMENT

In 1997, foreign direct investment substantially increased to US$ 3.62 billion as compared to US$ 2.27 billion in 1996; the growth was concentrated in particular industry and construction sectors.

MEDIUM-TERM OUTLOOK

The medium-term outlook is subject to considerable uncertainty at this stage. Significant gains have been made towards stabilizing the economy over the course of 1997. With domestic inflation having been kept in broad check, the grounds have been set for the decline in interest rates. Progress in structural reforms, especially in restoring the health of the financial sector, remains the key to re-establishing sustained growth and recovery. The authorities now see the contraction of real GDP not exceeding 7 percent, with prospects improving for a turnaround during 1999.

Thailand: measures to address the financial crisis

To address the financial crisis, the Thai authorities have taken the following measures:

Monetary and Exchange Rate Policy

- Monetary policy has been kept tight in order to stabilize the exchange rate, as the first order of priority, and remains prepared, in view of continued unsettled international financial market conditions, to implement necessary monetary measures if there were to be renewed pressures on the exchange rate. The exchange regime continues to be a managed float.
- With the external value of the baht stabilizing, lower than anticipated inflation, and a deeper than anticipated real economic contraction, the Bank of Thailand has cautiously eased monetary policy, allowing greater scope for reserve money expansion and increasing the broad money (M2A) growth target for 1998 from 5 to 9 percent.

Fiscal Policy

- In 1997, the government's fiscal position recorded a cash deficit for the first time since 1988. The overall public sector deficit target under the economic reform program for 1997/98 has been raised from 2.0 percent to 3.0 percent of GDP, in light of the deepening of the real economic downturn.
- Concrete measures have been developed to strengthen the social safety net and to increase spending on well-targeted public works programs; the 1997/98 budget has allocated funds equivalent to an additional 0.5 percent of GDP for this purpose.

Economic Policy

- Foreign investors have been allowed to acquire major stakes in bank and finance companies.
- Privatization policy has promoted corporate reconstruction.

Thailand: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP(billion US$)	111.1	124.7	142.8	166.3	184.3	160.5
Real GDP	8.1	8.3	8.8	8.6	5.5	-0.4
Total Consumption	n/a	n/a	n/a	n/a	n/a	n/a
• Private Consumption	7.8	8.7	8.2	7.9	6.2	-0.4
• Government Consumption	6.4	5.1	7.6	8.2	9.5	-0.7
Total Investment	n/a	n/a	n/a	n/a	n/a	n/a
• Private Investment	1.1	10.6	8.5	10.3	2.0	-23.4
• Government Investment	26.5	4.5	22.9	16.0	20.8	11.3
Exports of Goods and Services	13.2	13.0	21.3	23.6	-0.2	3.8
Imports of Goods and Services	5.5	12.0	17.6	30.5	0.6	-13.4
Fiscal and External Balances (% of GDP)						
Budget Balance [1]	3.1	2.2	1.8	2.7	1.9	-1.4
Merchandise Trade Balance (f.o.b.)	-3.6	-3.4	-2.6	-4.9	-5.1	-3.2
Current Account Balance	-5.7	-5.1	-5.6	-8.1	-7.9	-2.0
Capital Account Balance	8.49	8.36	8.41	12.97	10.73	-5.20
Economic indicators (% change from previous year, except as noted)						
GDP Deflator	4.2	3.4	4.7	6.3	4.8	5.5
CPI	4.1	3.3	5.0	5.8	5.9	5.6
M3	15.8	18.4	12.9	17.0	12.9	2.1
Short-term Interest Rate[2] (%)	7.0	5.5	6.25	10.5	12.0	24.0
Exchange Rate (baht/US$)	25.40	25.32	25.15	24.95	23.32	31.40
Unemployment Rate (%)	3.0	2.6	2.6	2.6	2.0	3.5
Population (millions)	57.79	58.34	59.10	59.80	60.00	60.72

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Budget balance is on a Government Finance Statistic (GFS) basis
(2) Short-term interest rate is the 1-day R/P Rate for December of the given year.

Forecasting Summary (% change from previous year)

	1998					1999-2001				
	Official	IMF	LINK	ADB	OECD	Official	IMF	LINK	ADB	OECD
Real GDP	-7.0	-8	-7.5	-3.0	-1.5	1.8	n/a	2.8	1.0	4.5
Real exports	1.4	n/a	-3.7	5.0	n/a	5.0	n/a	6.7	8.0	n/a
Real imports	-17.7	n/a	-36.8	-15.0	n/a	6.5	n/a	10.3	3.0	n/a
CPI	9.2	9	n/a	15.0	12.0	6.0	n/a	n/a	9.0	6.0

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998). The LINK forecast is from the World Outlook (Project LINK, September 1,1998); figures for the period 1999-2001 refer to 1999 only. The ADB forecast is from the Asian Development Outlook 1998; figures for the period 1999-2001 refer to 1999 only. The OECD forecast is from the OECD Economic Outlook (OECD, September 1998); figures for the period 1999-2001 refer to 1999 only.

UNITED STATES OF AMERICA

The United States enjoyed continued strong growth with declining inflation in 1997 and through the first half of 1998, extending the current expansion and contributing to the realization of a budget surplus in FY1998.

GDP

Real GDP growth accelerated to 3.9 percent in 1997 (1996: 2.8 percent), marking the 6th consecutive year of expansion. U.S. growth accelerated further to a 5.4 percent annual pace in the first quarter of 1998 before moderating to a 1.8 percent pace in the second quarter, leaving U.S. real GDP in the first half approximately 3¾ percent higher than in the corresponding year-earlier period.

In 1997, the largest contribution to growth came from personal **consumption** expenditure, which rose 3.3 percent. This increase in household spending reflects rising incomes, wealth, and confidence in the economy: in 1997, personal income grew 3.7 percent, the stock market closed at levels 30 percent higher than the year before, and measures of consumer sentiment were at or near record highs. A strong surge in **investment** was the other force helping to drive growth. Investment rose 12 percent in 1997, led by large increases in equipment purchases. Industrial equipment grew a healthy 7 percent, and transportation equipment grew 10 percent, over the year. Business equipment grew by 12 percent, due primarily to strong growth in office and computing equipment and telecommunications equipment. This increased demand reflects declining prices, new technologies becoming more readily available, and expanded network capacity.

The rapid growth in consumption and investment combined to push growth in **real private domestic demand** to 4.8 percent over the four quarters of 1997. The impact of this surge of private spending was muted, however, by a continuing decline in **real Federal Government spending**, slow growth in spending by State and local governments, and erosion in net exports. Strong domestic demand helped bring about a stronger increase in imports than exports in 1997, which will likely continue in the international adjustment following the crisis in East Asia. This has helped to relieve domestic inflationary pressures and extend the current expansion.

INFLATION

Inflation remained remarkably subdued in 1997. The CPI rose 2.3 percent, which was 0.6 percentage points less than its year-earlier rate. This was surprising since the unemployment rate fell by about half a percentage point during this time, and is currently below most previous estimates of the natural rate of unemployment. Falling import prices associated with the appreciation of the US dollar and the declines in commodity prices were important contributing factors to this inflation performance. In the first 8 months of 1998, the U.S. CPI was, on average, up only 1.6 percent over the year-earlier period.

EMPLOYMENT

Employment rose by 3.2 million in 1997, as more jobs were created than in each of the last two years. The **unemployment rate** fell to its lowest point in recent decades averaging 4.9 percent in 1997; at the same time the employment/population ratio reached an all-time high of over 64 percent, reflecting the economy's strong job creation record. The unemployment rate continued to decline in the first half of 1998, reaching as low as 4.3 percent during the second quarter. The job market weakened in the third quarter, reflecting in part the transient effects of the prolonged General Motors strike.

CURRENT ACCOUNT

The current account deficit grew to US$ 155 billion, accounting for 1.9 percent of GDP (1996: -1.8 percent), as the strong investment climate continued to attract capital inflows and rising domestic incomes increased demand for imports. The deficit widened in the first two quarters of 1998, to 2.3 percent and 2.7 percent of GDP respectively, in large measure due to the decline in exports of goods and services to Asia and sustained growth in imports from this region.

EXCHANGE RATE

The US dollar has been appreciating on world markets since 1995, following the strong expansion of the U.S. economy. In 1997, the dollar rose 3.5 percent in real terms against a trade-weighted worldwide average of other currencies. Going into 1998, this appreciation has become more marked, as the unique role of the dollar in international markets has led to a confidence effect as investors seeking assets in stable currencies have increased demand for the dollar and contributed to its further appreciation. Most recently, the appreciation trend has reversed against a number of currencies.

FOREIGN DIRECT INVESTMENT

The U.S. Capital Account recorded $264 billion in net foreign investment into the United States in 1997. Portfolio investment and bank lending, which represent four-fifths of private asset flows, are the source of net investment into the United States. The remainder is foreign direct investment (FDI), for which the United States is a net investor in the world.

The United States remains both the largest source of and the largest host to FDI in the world. In 1997, **U.S. direct investment abroad** in the balance of payments accounts rose to $119 billion, 28 percent higher than 1996. Europe and Canada were the largest hosts to this investment. **Foreign direct investment in the United States** amounted to $108 billion in 1997, an increase of 16 percent over 1996. These developments were balanced by significant net inflows of portfolio investment

FISCAL POLICY

Fiscal policy was tight in 1997, with the adjusted structural budget deficit declining by \$54 billion in FY1997 from \$112 billion in FY1996. Real government expenditures grew slowly in 1997, and all of that came from expenditures by State and local governments. Real Federal Government expenditures fell in 1997, reflecting ongoing efforts to balance the Federal budget. The Federal budget position has improved in each year since 1992, the longest unbroken period of improvement since 1970. In FY 1998 (ending September 30), the Federal Government realized a budget surplus.

MONETARY POLICY

Although five years into the current expansion, with low and falling unemployment rates, monetary policy was less restrictive in 1997 than many expected early in the year. This was because inflation continued to decline, principally due to external effects such as low import prices. Growth of M2 remained steady at 4.9 percent in 1997, the same as in 1996. Short term interest rates remained at roughly 5 percent, and long-term interest rates fell. Ten-year Treasury bond yields were less than 6 percent by the end of 1997. The Federal Reserve Board cut the federal funds rate by 25 basis points on September 29, 1998, and by a further 25 basis points on October 15, 1998.

MEDIUM-TERM OUTLOOK

Following the strong performance in the first half of 1998 that left U.S. real GDP 3¾ percent higher than in the corresponding year-earlier period, U.S. growth is generally expected to moderate to the 2 to 2½ percent range in the second half of 1998 and over the period to 2000. The IMF now projects 3.5 percent growth in 1998 as a whole, followed by 2.0 percent in 1999.

Both supply- and demand-side considerations argue for some moderation in real GDP growth from the rapid 3½ percent pace of the past two and a half years. The unemployment rate has fallen about one percentage point since 1995, and it is doubtful whether a further decline of this magnitude could be accommodated without inflationary consequences. Finally, rates of growth in a number of components of demand in recent years are not likely to be sustainable over the long run, including business demand for capital goods, consumer demand for durables, and inventory investment.

The government projects U.S. long run GDP growth at about 2.4 percent per year through 2005. This is consistent with the 2.4 percent annual growth since the last business-cycle peak as well as with reasonable growth rates of its supply-side components. However, the unemployment rate has been falling by about 0.1 percentage point a year, suggesting that potential output has been growing more slowly than aggregate demand--at about 2.2 percent per year. This estimate is likely to be understated, however, due to inadequacies in current measures of inflation. Revisions to the CPI currently being undertaken are likely to boost measured real output by about 0.2 percentage points.

United States of America: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP (billion US$)	6244.5	6558.1	6947.0	7265.4	7636.0	8079.9
Real GDP	2.7	2.3	3.5	2.0	2.8	3.9
Total Consumption	n/a	n/a	n/a	n/a	n/a	n/a
• Private Consumption	2.8	2.9	3.3	2.4	2.6	3.3
• Government Consumption	0.5	-0.9	0.0	0.0	0.5	0.9
Total Investment	7.1	9.3	13.0	1.6	7.8	12.0
• Private Investment	n/a	n/a	n/a	n/a	n/a	n/a
• Government Investment	n/a	n/a	n/a	n/a	n/a	n/a
Exports	6.6	2.9	8.2	11.1	8.3	12.3
Imports	7.5	8.9	12.2	8.9	9.1	14.2
Fiscal and External Balances (% of GDP)						
Budget Balance	-4.7	-3.9	-3.0	-2.3	-1.4	-0.3
Merchandise Trade Balance (f.o.b.)	-1.5	-2.0	-2.4	-2.4	-2.5	-2.4
Current Account Balance	-0.9	-1.4	-1.9	-1.8	-1.8	-1.9
Capital Account Balance	n/a	n/a	n/a	n/a	n/a	n/a
Economic Indicators (% change from previous year, except as noted)						
GDP deflator	2.8	2.6	2.4	2.5	2.3	2.0
CPI	3.0	3.0	2.6	2.8	2.9	2.3
M2	1.9	1.1	1.4	2.1	4.9	4.9
Short-term Interest rate[1] (%)	3.5	3.0	4.3	5.5	5.0	5.1
Exchange Rate [2]	95.7	97.9	96.5	91.9	96.9	106.0
Unemployment Rate (%)	7.5	6.9	6.1	5.6	5.4	4.9
Population (millions)	255.0	257.8	260.4	262.8	265.2	267.6

Source: Data are as submitted by member economies, unless otherwise specified.
Notes: (1) Short-term interest rate is the Treasury Bill Rate. Exchange rate is the real effective exchange rate index as provided by the IMF, International Financial Statistics, September 1998.

Forecasting Summary (% change from previous year)

	1998				1999-2001			
	Official	IMF	LINK	OECD	Official	IMF	LINK	OECD
Real GDP	n/a	3.5	2.7	2.7	n/a	2.0	2.3	2.1
Real exports	n/a	n/a	6.4	5.2	n/a	n/a	6.2	5.4
Real imports	n/a	n/a	10.2	13.6	n/a	n/a	6.7	9.7
CPI	n/a	1.6	n/a	1.0	n/a	2.3	n/a	1.7

Note: The IMF forecast is from the World Economic Outlook (IMF, September 1998); figures for the period 1999-2001 refer to 1999 only. The LINK forecast is from the World Outlook (Project LINK, May 1,1998), figures for the period 1999-2001 refer to 1999 only; The OECD forecast is from the OECD Economic Outlook (OECD, June 1998), figures for the period 1999-2001 refer to 1999 only..

THE SOCIALIST REPUBLIC OF VIETNAM

In Vietnam, 1997 was considered a successful year in the economic field, with real growth relatively high and inflation falling from the previous year. Foreign direct investment reached the expected figures and stability of financial and monetary policies was maintained.

GDP

Real GDP growth in 1997 was 8.8 percent, marginally below the rate of 9.34 percent that was realized in 1996. This reduction reflected moderation in growth in the industrial sector to 16.3 percent, 0.8 percent lower than in 1996, and in the service sector to 8.7 percent, 1.3 percent lower than in 1996. In 1998, industrial production remained relatively robust through the first quarter, growing 13 percent over the year-earlier period, maintaining the pace of 1997 (13.2 percent average annual growth).

Consumption expanded by 7.6 percent in real terms in 1997, down from 8.4 percent in 1996. In nominal terms it rose to Vietnam Dong (VND) 237,500 trillion an increase of 9.3 percent in comparison with that of 1996.

Investment grew 12.2 percent in real terms in 1997. In nominal terms it reached VND 90 trillion in 1997, an increase of 16.9 percent in comparison with 1996. This investment was financed by a combination of the State budget (VND 17.7 trillion), investment credits (VND 9.1 trillion), State-owned enterprises (VND 13.9 trillion), households (VND 21.0 trillion), and foreign direct investment (VND 27.7 trillion). In US dollar terms, foreign direct investment amounted to US$ 2.56 billion, an increase of 28.6 percent in comparison with that of 1996).

INFLATION

In 1997, the Consumer Price Index (CPI) increased by 3.6 percent, 0.9 percent lower than the rate of 4.5 percent in 1996. Prices of food and foodstuffs increased by 1.6 percent, while prices of other goods increased by 4.4 percent. Services price increased by 8.1 percent. The reduction in growth of prices of goods and services contributed to the stabilization of living standards of households; however, it also reflected pressures on production and on business activities more generally.

EMPLOYMENT

At present, during the urbanization and industrialization process, urban unemployment has become a significant problem. In 1997, the unemployment rate in the cities and towns was 8 to 9 percent, higher than the 6 percent recorded in 1996. A total of 1.3 million jobs was created.

CURRENT ACCOUNT

In 1997, the **current account** deficit was US$ 1.6 billion, US$ 0.7 billion lower than in 1996.

Export revenues in 1997 amounted to US$ 8.9 bill, an increase of 22 percent in comparison with 1996. Foreign-invested enterprises accounted for US$ 1.5 billion of export earnings. At the same time, the value of **imports** amounted to US$ 11.27 billion, an increase of 1.1 percent in comparison with 1996. As a result, the trade deficit was substantially reduced to US$ 2.37 billion, accounting for 9.5 percent of GDP or 26.6 percent of total export earnings.

State-owned enterprises accounted for US$ 1.4 billion of the trade deficit; this represented an increase of 11.8 percent in comparison with 1996. The main imported items were materials and equipment used for implementing licensed investment projects.

EXCHANGE RATE

The internal exchange rate in 1997 was changed a number of times to create favourable conditions for inter-bank activities, including the inter-bank foreign exchange market, and to limit foreign exchange investment. In the first quarter of 1997, the exchange rate was adjusted from 1 percent to 5 percent in comparison with the real rate; in the fourth quarter, it was adjusted to 10 percent in comparison with the real rate for these purposes. Following the move by the State Bank of Vietnam to depreciate the VND from 11,175 per US dollar to 11,800, the exchange rate for other commercial banks was increased close to the ceiling rate of 10 percent. Currently, the commercial exchange rate ranges from VND 12.975 to 12.985 against the US dollar.

FOREIGN DIRECT INVESTMENT

In 1997, the Government of Vietnam issued licenses for 330 projects with registered capital of US$ 4.56 billion and US$ 1.1 billion for project expansions. The amount of implemented capital was US$ 2.56 billion, 28.6 percent higher than that of 1996. The allocation of foreign direct investment became more appropriate, with a greater amount of investment concentrated in infrastructure construction as well as in production. Conversely, the total amount of registered capital and the number of projects slated for construction of hotels and offices for rent were reduced.

FISCAL POLICY

The fiscal situation improved in 1997, especially in the latter months of the year, which made an important contribution to supporting the development of Vietnam's economy. Total revenue of the State budget in 1997 amounted to 21.7 percent of GDP. Meanwhile, total State expenditures increased by 12.8 percent in comparison with 1996.

MONETARY POLICY

Total liquidity as of the end of 1997 increased by 26.1 percent in comparison with year-end 1996. In 1997, total mobilized capital increased by 30.6 percent in comparison with 1996, which contributed to the increase in bank deposits from 25.4 percent of GDP in 1996 to 28.8 percent of GDP in 1997. Of this amount, VND deposits increased by 19 percent and foreign currency deposits increased by 34.3 percent.

Total domestic credit at year-end 1997 was up 27 percent in comparison with the end of 1996. Of particular note was the significantly greater increase in the amount of long- and medium-term credit (up 92.6 percent over year-end 1996), compared to short-term credit (up 17.3 percent over year-end 1996). Meanwhile, foreign currency credit increased by 23.1 percent and accounted for 35.2 percent of total credit.

MEDIUM-TERM OUTLOOK

In recent years, Vietnam's economy has achieved relatively high and continuous growth. To date, it has for the most part escaped the impacts of the crisis. The social-political situation has been stable and the quality of life of people has been improved. The five-year plan (1996-2000) has set the following economic objectives: to maintain stable and efficient growth, to stabilize the macro-economy and to create the prerequisites to move to a higher stage of development after the year 2000.

- **GDP**: It is estimated that real GDP will increase at the rate of 6 percent in 1998 and to pick up to the 6 to 7 percent range in 1999 and beyond.. The forestry, agricultural and aquatic sector is projected to grow at about 3.0-3.5 percent per annum, the industrial sector at about 10-11 percent, and the service sector at about 5 to 6 percent. The share of industrial production and construction in GDP is projected to increase from 32 percent in 1998 to 34 percent in 2000. At the same time, the share of forestry, agriculture and the aquatic sector is projected to decline from 25.5 percent in 1998 to 23 percent in 2000. The service sector is projected to increase its share of GDP from 42.5 percent in 1998 to 43 percent in 2000.
- **Inflation**: The objectives are to control inflation at moderate levels, with consumer price growth under 10 percent per year.
- **Financial Sector:** The objectives are to develop domestic financial and capital markets, including to gradually establish a securities market.
- **External**: The objectives are to increase convertibility of the Vietnamese currency, to stabilize the exchange rate based on the purchasing power of the Vietnamese currency, and to improve the international balance of payments situation.
- **Employment**: The objective is to create jobs for about 6.5-7 million of people over the plan period to 2000, to reduce the rate of unemployment in the cities and towns to less than 5 percent, and in rural areas to have 75 percent of working time of rural labor used. Wages are to be adjusted and international issues in wage policy are to be solved. The objective for 1998 is to create jobs for 1.3 million workers.

Vietnam: Overall Economic Performance

	1992	1993	1994	1995	1996	1997
GDP and Major Components (% change from previous year, excepted as noted)						
Nominal GDP(billion US$)	9.9	12.8	15.5	20.3	23.3	25.0
Real GDP	8.6	8.1	8.8	9.5	9.3	8.8
Total Consumption	4.2	4.4	5.0	7.3	8.4	7.6
• Private Consumption	3.9	3.5	4.4	7.2	8.5	n/a
• Government Consumption	7.5	12.8	8.9	8.5	7.6	n/a
Total Investment	40.7	47.2	14.1	10.4	18.0	12.2
• Private Investment	n/a	n/a	n/a	n/a	n/a	n/a
• Government Investment	n/a	n/a	n/a	n/a	n/a	n/a
Value of Exports (in US$)	23.7	15.7	36.8	34.4	31.1	22.0
Value of Imports (in US$)	8.7	54.4	48.5	40.0	36.6	1.1
Fiscal and External Balances (% of GDP)						
Budget Balance	n/a	n/a	n/a	n/a	n/a	n/a
Merchandise Trade Balance (f.o.b.)	-0.6	-4.3	-7.7	-11.5	-13.5	-9.5
Current Account Balance	-0.1	-5.9	-7.6	-9.4	-9.8	-6.4
Capital Account Balance	-6.6	-0.8	-8.7	-9.4	-8.1	n/a
Economic indicators (% change from previous year, except as noted)						
GDP Deflator	32.6	14.3	14.5	19.5	6.1	5.1
CPI	17.6	5.2	14.4	12.7	4.5	3.6
M2	33.7	10.9	33.2	22.6	22.7	26.1
Short-term Interest Rate (%)	n/a	n/a	n/a	n/a	n/a	n/a
Exchange Rate (Dong/US$)	11150	10640	10955	10970	11100	11600
Unemployment Rate (%)	n/a	n/a	n/a	n/a	6	8.5
Population (millions)	69.4	71.0	72.5	73.9	75.3	76.7

Source: Data are as submitted by member economies, unless otherwise specified.

Forecasting Summary (% change from previous year)

	1998			1999-2001		
	Official	IMF	ADB	Official	IMF	ADB
Real GDP	6-7	4.0	5.0	6-7	n/a	6.5
Real exports	10	n/a	15.0	10	n/a	16.0
Real imports	19	n/a	5.0	19	n/a	5.0
CPI	<7.0	9.0	4.0	<10	n/a	4.0

Note: The official forecast for 1999-2001 refers to 1999 only. The IMF forecast is from the World Economic Outlook (IMF, September 1998). The ADB forecast is from the Asian Development Outlook 1998; figures for the period 1999-2001 refer to 1999 only.

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