1995 APEC Economic Outlook



APEC Economic Committee November 1995

1995 REPORT ON THE APEC REGIONAL ECONOMY

PERFORMANCE, STRUCTURE, OUTLOOK AND CHALLENGES

APEC Economic Committee

Coordinated by the Economic Planning Agency of Japan

1995 REPORT ON THE APEC REGIONAL ECONOMY PERFORMANCE, STRUCTURE, OUTLOOK, AND CHALLENGES

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Foreword

The 1995 APEC Economic Outlook was prepared by the Economic Committee for presentation to the Seventh APEC Ministerial Meeting 16-17 November 1995 in Osaka. It was coordinated by Japan with information provided by APEC member economies, and finalized at the Economic Committee meeting held on 6-8 October, prior to the Ministerial Meeting.

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SUMMARY

As a result of the strong economic growth in recent years, the APEC region has increasingly become the center of gravity of the global economy. The region now contributes over half the world's GNP, includes the world's two largest economies, and features the world's fastest growing regional economies. The APEC developing economies, in particular, have been widely recognized as the "global center of growth". Accordingly, developments within the APEC region have become a matter of concern not only for the region itself but for the world economy as a whole.

In this regard, the APEC economic leaders' "Declaration of Common Resolve", which calls for the establishment of free and open trade and investment in the APEC region by 2010, for the industrialized economies, and by 2020, for the developing economies, is an important challenge for the region. Successful implementation of this initiative will help maintain the economic dynamism of the region, over the medium and long-term, and provide growth momentum to the global economy. The formulation of the "Action Agenda", which sets out the framework for liberalization and facilitation of trade and investment and economic and technical cooperation, is a vital step in that direction.

This report provides a backdrop to the increasing cooperation among APEC economies by providing an outline and analysis of the short- and medium-term economic outlook. It also explores the key factors explaining the region's increasing economic interdependence.

Recent Macroeconomic Performance and Short-term Outlook

At the beginning of the 1990s, there was a divergence in economic performance among the economies in the region; a downturn was experienced in the industrialized economies while developing economies sustained their relatively high growth. By 1994, economic recovery was firmly established in most of the industrialized economies while the developing economies generally managed to continue their high growth without a serious worsening of inflation. The overall trend in the region suggested, therefore, a transition to low-inflationary, sustainable growth.

Developments in 1995 have been heavily influenced by a few events, including the Mexican crisis at the end of 1994 and the major yen/dollar exchange rate fluctuations that have been experienced so far in 1995. Nevertheless, the macroeconomic outlook for the APEC region in 1995 and 1996 points toward further progress in the transition to low-inflationary, sustainable growth. In 1995, the average real growth rate for the region is expected to be 3.1 percent, only slightly lower than the 3.5 percent of the previous year. The average inflation rate for the region will remain moderate at 4.0 percent (Table 1).

APEC Developing Economies as a "Global Center of Growth"

The developing economies in the APEC region have maintained relatively high growth since the 1980s by, *inter alia*, attracting foreign direct investment and expanding exports. This was made possible by the adoption of policies that were conducive to growth, including policies that contributed to a stable macroeconomic environment and policies that contributed to improving the efficiency of resource allocation. The latter included domestic liberalization policies such as privatization and deregulation and outward-looking policies such as the liberalization of trade and capital movement.

The high growth of the APEC developing economies promoted economic growth in other economies, including those in the non-APEC region, by increasing imports from them and thereby stimulating production in these economies. The acknowledgment of the developing economies in the APEC region as the "global center of growth", therefore, not only recognizes their relatively high growth, it also recognizes that their economic growth tends to provide stimulus to the growth of the others.

Deepening of Economic Interdependence

The strong macroeconomic performance of the APEC region in recent years has both facilitated, and been facilitated by, a deepening of economic interdependence within the region through growing trade and financial linkages.

In merchandise trade, the ratio of intra-regional trade to total trade rose from approximately 60 percent to 70 percent between the early 1980s and the early 1990s (Chart 2). The significant interdependence within East Asia and the Oceania sub-region and the North and Latin American sub-region is increasing, as is the interdependence between the two sub-regions. The structure of intra-regional trade, by product, in the APEC region is evolving from one that reflects "vertical" linkages in the stages of production to one that reflects "horizontal" linkages established by growing intra-industry trade.

The deepening interdependence in capital transactions can be seen in the pattern of foreign direct and portfolio investment. The share of the APEC member economies' outward foreign direct investment flowing into other economies in the APEC region in their total outward foreign direct investment has risen between 1980 and 1992, on an accumulated stock basis, from approximately 41 percent to 51 percent (Chart 3). The rising significance of "dragon bonds" (floated in Asian markets, other than the Tokyo market) suggests a similar deepening of intra-regional interdependence in portfolio investment.

Driving Forces Behind the Deepening of Economic Interdependence

The deepening of economic interdependence has been driven by the growth of foreign direct investment as firms internationalized their production within the region. This has not only contributed to the deepening interdependence in capital transactions, but also contributed to intensifying trade links within the region. Another driving force for the deepening of economic interdependence has been the growth of financial flows within the region due to more liberalized investment regimes and the evolution of capital markets, particularly in the developing economies in the region. Financial integration, as such, has also been supported by the emergence of Hong Kong and Singapore as international financial centers, which not only acted as intermediaries for the region, but also encouraged the flow of investment from the non-APEC region.

The driving forces behind the deepening of economic interdependence have been a growth in trade and investment, fostered by trade liberalization, and reflecting the ability of increasingly competitive developing economies to access open export markets, and a hospitable climate for foreign and domestic investment. A characteristic pattern of economic development in the region has been the "flying geese formation" where production of labor-intensive goods has migrated progressively to emerging economies in the region, thereby promoting economic interdependence.

Prospective Change in Economic Interdependence

The deepening of economic interdependence in the region is expected to continue in the future.

First, rapid economic growth in the developing economies is increasing labor and land costs, changing the basis of their export competitiveness. In an environment of further liberalization of trade and investment and increasing competition from other liberalizing economies, these trends pose a challenge for the APEC developing economies. They need to seize the changing and expanding trade opportunities to secure their future economic growth.

Second, increases in income levels in the region have not only expanded the size of the domestic market but also have increased sophistication of consumer demand. These provide new business opportunities and promote expansion of domestic demand, strengthening this source of economic growth.

Third, the development of domestic demand in these economies will stimulate new

types of foreign direct investment in the domestic demand-oriented manufacturing industries and non-manufacturing industries aimed at securing shares of the domestic market. This is in addition to the already significant foreign direct investment in export-oriented manufacturing industries.

Medium-term Economic Outlook

The prospects for sustaining the recent high growth of the APEC region over the medium-term are good. This is important not only for the region but also for the world economy as a whole.

Following the 2.7 percent average annual growth rate for the region in the first half of the 1990s, a sustained steady growth of around 3 1/2 percent is expected for the region in the five years up to the year 2000. This would result in the APEC regional economy expanding by a cumulative 20 percent over the period (Chart 4).

In the industrialized economies, growth is expected to rise from approximately 2 percent in the first half of the 1990s to approximately 3 percent in the second half. Meanwhile, the developing economies are expected to continue to enjoy high growth; a projected

6 1/4 percent in the second half of 1990s, following the 7 percent achieved in the first half of the decade.

Growth Potential and Relevance of Economic Interdependence

The outlook is supported by the strong growth potential of the region. The contribution to growth from the mobilization of capital and labor can be expected to be maintained in the medium-term due to the high rates of domestic savings, increasing accessibility of foreign savings, and the large reserves of labor.

Qualitative improvements of capital and labor in the medium-term are also expected to

contribute to sustained growth. Large inflows of foreign direct investment facilitate the introduction of plant and equipment embodying the latest technology, while the improvement of school education and vocational training further raise the quality of labor, for which the region has already built up an excellent reputation. Moreover, expected increases in total factor productivity should provide additional momentum to growth.

To realize the region's strong growth potential, it is essential to have an effective incentive structure in the APEC region. The fundamental driving force in this regard is provided by competition. In the APEC region, the liberalization and the deepening of economic interdependence is an important source of competition. The deepening of economic interdependence contributes to sustained growth by providing incentives to mobilize inputs, to improve their quality, and to raise total factor productivity. In this respect, implementation of the "Bogor Declaration" and realization of free and open trade and investment in the APEC region are of fundamental importance to the achievement of the region's economic potential.

Medium-term Challenges for Sustained Economic Growth

The realization of sustained economic growth in the region over the medium-term also requires that various challenges be appropriately addressed. The initiatives to address these challenges can be grouped in four categories. First, there are initiatives to seize new growth opportunities, including opening markets and introducing further competition in these areas. Second, there are initiatives to secure growth potential, including the mobilization and improvement of capital and labor, and technological transfer and innovation. Third, there are initiatives to establish foundations for future development, including the elimination of factors that might constrain future growth. Lastly, there are initiatives to secure a stable macroeconomic environment in which firms and consumers can pursue their economic activities with minimal uncertainly.

This report highlights the growing integration within the APEC region, good prospects of strong growth over the medium-term in the context of generally low inflation, and the

importance of the APEC region in the global economy. In this respect, an agreement in Osaka on an APEC Action Agenda will facilitate realization of the region's economic potential and enhance its contribution to global prosperity.

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Notes

1. In this paper, the following regional classifications for the APEC region will, in principle, be used:

North America... Canada and the United States APEC Latin America... Chile and Mexico Northeast Asia...the People's Republic of China (thereafter the PRC), Hong Kong, Japan, the Republic of Korea (thereafter the ROK), and

Chinese Taipei

Southeast Asia... Brunei Darussalam, Indonesia, Malaysia, the Republic of the Philippines, Singapore, and Thailand Oceania... Australia, New Zealand, and Papua New Guinea East Asia... Northeast Asia and Southeast Asia Western Hemisphere... North America and APEC Latin America Eastern Hemisphere... East Asia and Oceania

2. When considered effective for analytical reasons, however, the following classifications will also be used:

APEC industrialized economies... Canada, the United States, Japan, Australia, and New Zealand

APEC developing economies... APEC member economies other than the above NIEs... Hong Kong, the Republic of Korea, Chinese Taipei, and Singapore ASEAN... Brunei Darussalam, Indonesia, Malaysia, the Republic of the

Philippines,

Singapore, and Thailand

East Asia developing economies... East Asia, excluding Japan

3. In tables and charts, the following abbreviations will be used when necessary:

CDA: Canada; USA: the United States; CHL: Chile; MEX: Mexico;
PRC: the People's Republic of China; HK: Hong Kong; JPN: Japan;
ROK: the Republic of Korea; CT: Chinese Taipei;
BD: Brunei Darussalam; INA: Indonesia; MAS: Malaysia;
RP: the Republic of the Philippines; SIN: Singapore;
THA: Thailand; AUS: Australia; NZ: New Zealand; PNG: Papua New Guinea.

CHAPTER 1. RECENT MACROECONOMIC PERFORMANCE AND SHORT-TERM OUTLOOK

-----Overview-----

This chapter discusses the recent macroeconomic performance of, and short-term outlook for, the APEC region.

Section 1 reviews macroeconomic performance up to 1994 and confirms that the region as a whole is in a process of transition to low-inflationary, sustainable growth.

Section 2 discusses the macroeconomic outlook for 1995/96 and finds that further progress in this transition is expected in the region.

Section 3 analyzes the region's macroeconomic performance from a global perspective. Two issues are discussed: one is the significance of the APEC developing economies as the "global center of growth". It is argued that this significance lies not only in the relatively high growth in these economies, but in the feature of this economic growth which tends to provide stimulus to the growth of other regions throughout the world. The other issue is whether we can observe synchronization of business cycles in the region. While some synchronization can be seen in sub-regions, it is not possible to find synchronization in the region as a whole. Possible explanations are discussed.

As a result of the strong economic growth in recent years, the APEC region has increasingly become the center of gravity of the global economy. The region now contributes over half the world's GNP (Table 1-0-1), includes the world's two largest economies and features the world's fastest growing regional economies. Developments in the APEC regional economy are, therefore, not only a matter of concern for the region itself but also for the world as a whole.

In this chapter, the recent macroeconomic performance of, and short-term outlook for, the region will be examined, with emphasis given to the role the region is playing in the global economy.

Section 1. Macroeconomic Performance to 1994

Economic performance in the 1980s and early 1990s

In order to assess the current situation, it is useful to look back over the macroeconomic performance of the region in the 1980s and the early 1990s (1990-1993) from a medium-term perspective.

After an extended period of strong growth in the 1980s, APEC industrialized economies experienced a cyclical downturn in the early 1990s (Chart 1-1-1). In contrast, while real growth rates of the NIEs also slowed in the early 1990s, they remained relatively high. In APEC Latin America and other Asian developing economies, growth rates actually accelerated from the 1980s to the early 1990s.

During the same period, inflation rates showed a favorable trend (Chart 1-1-2), easing below 4 percent in the APEC industrialized economies in the early 1990s. APEC developing economies, in general, also managed to reduce their inflation rates. However, inflation rates in APEC Latin America and the Republic of the Philippines, although decelerating, remained in double-digits in the early 1990s. Moreover, in some economies like the PRC and Hong Kong, inflation rates accelerated.

Transition to Low-Inflationary Sustainable Growth

A look at the economies of the region in 1994 shows that, in general, economic recovery strengthened in the industrialized economies, while the developing economies managed to continue their high growth without serious worsening of their inflation (Table 1-1-3). Overall, accordingly, the economy of the APEC region can be said to have been in the process of transition to a low-inflationary, sustainable medium-term growth path. On average, the region saw its real growth rate (defined here and below as real GDP growth rate) rise from 2.6 percent in 1993 to 3.5 percent in 1994. On the other hand, the rate of inflation (defined here and below as the rate of CPI increase) fell, though only marginally, from 3.0 percent in 1993 to 2.9 percent in 1994.

An examination of individual economies' macroeconomic performance, in 1994, is provided below.

North America

In **North America**, real growth accelerated from 3.0 percent in 1993 to 4.1 percent in 1994. Despite this, the rate of inflation fell from 2.9 percent to 2.4 percent.

In **Canada**, high growth in exports and plant and equipment investment helped boost real growth from 2.2 percent in 1993 to 4.3 percent in 1994. Despite strong employment growth, the unemployment rate remained relatively high at 10.4 percent and the rate of wage increases was restrained. Inflation, already low in 1993 at 1.8 percent, fell to 0.2 percent due to excise tax cuts. While the trade surplus rose, the deficit on the current account edged up slightly due to the increase in payments of investment income.

In the **United States**, business investment was extremely strong, with non-residential business fixed investment expanding by 12.9 percent on a fourth quarter over fourth quarter basis. This helped boost real growth from 3.1 percent in 1993 to 4.1 percent in 1994. As a result, the unemployment rate fell to 6.1 percent at the upper range of estimates of full employment and wage growth accelerated modestly. Inflation, however, remained at the low level of 2.6 percent. On the other hand, the current account deficit grew, due to growing imports and higher payments of investment income.

APEC Latin America

In **APEC Latin America**, inflation dropped from 8.5 percent in 1993 to 7.3 percent in 1994, while the real growth rate accelerated from 1.4 percent to 3.6 percent during the same period (these annual outcomes were not noticeably affected by the Mexican crisis which occurred in December 1994 and, as a result, impacted mainly on the 1995 figures).

In **Chile**, the past several years of high growth resulted in mounting inflationary pressures, which led to the adoption of restrictive macroeconomic policies. Accordingly, the real growth rate in 1994 slowed down to 4.2 percent, well below the 6.3 percent of the previous year. The unemployment rate rose from 4.7 percent to 6.0 percent, while inflation slowed from 12.2 percent to 8.9 percent. On the other hand, due in part to the high growth in exports, the trade balance turned to a surplus, and the deficit on the current account improved as well.

In **Mexico**, inflation dropped from the 8.0 percent of the previous year to 7.1 percent in 1994. Personal consumption and plant and equipment investment recovered, and real GDP growth rose from 0.7 percent in the previous year to 3.5 percent in 1994. The increase in imports, on the other hand, led to a greater deficit on the current account.

Northeast Asia

In Northeast Asia, real growth climbed from 1.7 percent in 1993 to 2.2 percent in 1994. Inflation also rose from 2.8 percent in 1993 to 3.2 percent in 1994.

In the **PRC**, fixed capital investment has grown strongly since 1992. With real GDP growing in the double-digit range over this period, signs of overheating appeared. Consequently, in 1993, a more restrictive macroeconomic policy stance was adopted. As a result, the real growth rate fell from the 13.4 percent of 1993 to 11.8 percent in 1994, but still remained high. At the same time, inflation soared to 24.1 percent in 1994, up from the previous year's 14.7 percent. On the external side, due in part to the depreciation of the renminbi, exports continued to rise, while imports slowed in tandem with the overall slower growth of the economy. This resulted in a return to surplus on both the trade balance and the current account.

In **Hong Kong**, good export performance and strong growth in fixed investment provided a substantial offset to the slow-down in private consumption. As a result, GDP growth remained steady at 5.4 percent in 1994, following 5.9 percent in 1993. The unemployment rate stood at 1.9 percent the level of full employment and the rate of wage increase was relatively rapid. The inflation rate slowed slightly from the previous year's 8.5 percent to 8.1 percent in 1994, though there was a pick-up in imported inflation towards the end of the year. The deficit on the visible trade account grew considerably in 1994 due to stock replenishment and increased capital goods imports. However, due to the large surplus on invisible trade, there was a small overall surplus on the combined visible and invisible trade account.

In **Japan**, the economy pulled out of its protracted economic downturn and started on the way to recovery at the end of 1993. However, the pace of recovery has been slow. Growth of only 0.6 percent was attained in FY1994-1995 after the minus 0.2 percent growth of FY1993-1994. The gap between supply and demand in the labor market remains large, and unemployment rose to 2.9 percent in FY1994. Meanwhile, the appreciation of the yen contributed to the stabilization of inflation as prices rose only 0.4 percent in FY1994. The surplus on the current account declined due to the sharp rise in imports and the growing deficit on the invisible trade balance.

In the **ROK**, the real growth rate soared to 8.4 percent in 1994, up from the 5.8 percent of 1993 due mainly to high growth in exports, private consumption, and private investment. As a result, unemployment fell from 2.8 percent to 2.4 percent. The rate of

wage increases rose accordingly, resulting in a rise of inflation to 6.2 percent. The improvement in export growth was due in part to the deterioration of competitiveness of Japanese goods caused by the appreciation of the yen. However, imports of capital goods and intermediate goods grew at an even faster rate, and the trade balance consequently turned to a deficit. Along with this, the current account increased further also turned to a deficit.

In **Chinese Taipei**, exports declined, but private consumption and private investment remained strong helping real GDP growth to edge up from 6.3 percent in 1993 to 6.5 percent in 1994. The unemployment rate of 1.6 percent in 1994 was consistent with a state of full employment. Inflation was a relatively high 4.1 percent, but this was partially caused by natural disasters. The surplus on the trade balance edged down slightly, causing the surplus on the current account also to decline.

Southeast Asia

In **Southeast Asia**, real growth rose from 7.0 percent in 1993 to 7.8 percent in 1994, the highest rate of growth in the APEC region. Inflation also rose, edging up to 6.4 percent in 1994 from 6.0 percent in 1993.

In **Brunei Darussalam**, the mining and manufacturing sectors grew only slightly. However, bolstered by the growth in the service sector, real GDP growth rose from 0.5 percent in 1993 to 1.8 percent in 1994. Inflation, on the other hand, fell from 4.3 percent in 1993 to 2.4 percent in 1994, reflecting the trends in the price of imported goods.

In **Indonesia**, exports slowed, but private consumption and private investment grew by large margins boosting real GDP growth from 6.5 percent in 1993 to 7.3 percent in 1994. Despite a large underemployed labor force and overall loose labor market conditions, the rate of inflation in 1994 was 9.2 percent, slower than in 1993 but still high. Exports have grown, while imports of capital goods and intermediate goods, among others, have risen faster. In addition, the deficit on the invisible trade balance has risen. As a result, the deficit on the current account has increased.

In **Malaysia**, the real growth rate reached 9.2 percent in 1994, primarily driven by exports. As a result, the unemployment rate was a low 2.9 percent, consistent with a state of full employment. Despite these developments, inflation recorded a low 3.2 percent. Imports of capital and intermediate goods in particular grew faster than exports, turning the trade balance into a deficit; the deficit on the current account swelled as well.

In the **Republic of the Philippines**, real GDP growth accelerated from 2.1 percent in 1993 to 4.3 percent in 1994 led by exports, private consumption and private investment.

Consistent with the economic recovery, employment in industry and services increased substantially. However, changing planting patterns in agriculture led to a slightly higher unemployment rate of 9.5 percent for 1994. Inflationary pressures at the start of the year, arising from newly mandated wage increases and the imposition of an oil levy, were successfully trimmed down by the end of the year. On the other hand, the increase in imports, particularly of capital goods and intermediate goods, caused the deficit on the trade balance to grow. However, the surplus on invisible trade increased, causing the deficit on the current account to shrink.

In **Singapore**, favorable exports helped the economy achieve 10.1 percent real growth in 1994, a continuation of the previous year. The 1994 unemployment rate was at a low 2.6 percent, consistent with a state of full employment, and the rate of wage increase rose. Inflation, however, remained at a low 3.1 percent even with the effect of the introduction of the GST (Goods and Service Tax). The current account surplus increased in 1994, due mainly to the reduction in the trade deficit.

In **Thailand**, private consumption, fixed capital investment, and exports all saw favorable growth, supporting real GDP growth of 8.5 percent in 1994. The labor market remained tight with the unemployment rate holding at 0.9 percent. Inflation increased to 5.0 percent, due to the growth in the money supply and, further, to the rise in import prices caused by the depreciation of the baht. The deficit on the current account shrank due to robust export performance, despite the strong growth in imports, of capital and intermediate goods in particular.

Oceania

In **Oceania**, as well, the real growth rate rose, climbing from 3.9 percent in 1993 to 4.8 percent in 1994. Inflation, however, only rose slightly from 1.4 percent in 1993 to 2.4 percent in 1994.

In **Australia**, real GDP grew by 4.8 percent in FY1994-95, the highest rate of increase since FY1987-88. Most components of output contributed to growth in FY1994-95, with the notable exception of net exports, which were adversely affected by a severe drought and an upswing in imports resulting from the strength of domestic demand. The strength of activity has also contributed to strong, sustained employment growth which has resulted in a marked decline in the unemployment rate. Inflation rose to 3.2 percent for FY1994-95, boosted in particular by higher interest-related charges which are included as part of the CPI. The current account deficit increased in FY1994-95, mainly reflecting a deterioration in the

merchandise trade deficit.

In **New Zealand**, the real growth rate rose to 6.2 percent in 1994, up from 4.9 percent in the previous year. The employment rate fell to 8.1 percent, and a rise was observed in the rate of wage increases. Inflation, however, held at a low 1.8 percent. The shrinking surplus on the trade balance, caused by growing imports, was offset by a lower deficit in the invisible trade balance, so that the current account deficit remained roughly the same as in the previous year.

In **Papua New Guinea**, declining production in the mining sector caused the real growth rate to plunge to 0.8 percent in 1994. The demand and supply condition in the labor market eased as a result. Inflation, on the other hand, climbed to 6.1 percent. The fall in exports of mining products and the increase in imports resulted in a smaller surplus on the current account.

Section 2. Macroeconomic Outlook for 1995/1996

The macroeconomic outlook for the APEC region in 1995/1996 points, overall, toward further progress in the transition to a low-inflationary, sustainable medium-term growth path, despite the Mexican crisis at the end of 1994 and the major yen/US dollar exchange rate fluctuation that has been experienced so far in 1995. The region on average should maintain a real growth rate of 3.1 percent in 1995 and keep inflation low at 4.0 percent (Table 1-1-3). In 1996, basically the same trend is expected to continue. The forecasts made by international organizations and private institutions share broadly the same view (Attachment Table 1).

The outlook for macroeconcomic performance in 1995/1996 in individual economies is provided below.

North America

In **North America**, the real growth rate is expected to slow to 2.8 percent in 1995. Along with this, inflation will be only 3.0 percent.

In **Canada**, real growth in 1995 is likely to fall sharply to 2.3 percent from 4.3 percent in 1994. This slower rate of growth reflects high interest rates, stagnant employment growth and the slowing of the U.S. economy. Inflation is likely to remain moderate at about 2.4 percent. The current account deficit is forecast to decline by half to C\$11.3 billion, reflecting a strengthening of real net exports.

In the **United States**, in response to interest rate increases over 1994 and early 1995, growth slowed over the first half of 1995. The real growth rate should decline to 2.8 percent for the year as a whole. Although inflation is expected to rise somewhat, it will likely remain stable at 3.0 percent. The current account deficit is projected to worsen over 1995 but to improve over the long run. The projection of significant improvement in the pace of fiscal consolidation, which has been proceeding at a significant tempo but is likely to accelerate sharply over the next several years, will raise national savings, thereby reducing the inflow of foreign capital.

APEC Latin America

In **APEC Latin America**, real output is expected to contract by 3.5 percent while the inflation rate is expected to rise to 42.3 percent. These figures are heavily influenced by the spike in prices and contraction in output in Mexico resulting from the crisis experienced at the end of 1994, and mask more favorable developments during the course of 1995.

In **Chile**, during the first semester of 1995, the growth of GDP was 7.1 percent, the unemployment rate was 5.6 percent and the inflation rate was 7.6 percent. The current account turned into a surplus of US\$725.0 million during the first half of the year. The annual figures for 1995 and 1996 are expected to follow this trend.

In **Mexico**, the implementation of a strong economic adjustment program during 1995, which included tight monetary and fiscal policies, helped rein in inflation. Inflation peaked in April 1995 and has since followed a downward trend. The continuation of fiscal and monetary discipline should lead to considerably lower inflation levels during 1996. As a result of the adjustment program, there will be a contraction in economic activity during 1995, but it is expected that the economy will start growing again by the end of the year. Economic growth during 1996 should be positive. During the first eight months of 1995, exports grew at rates greater than 30 percent, while imports contracted by 7 percent, leading to a substantial improvement in the trade balance. It is expected that the current account deficit will fall from almost US\$30 billion in 1994 to less than US\$3 billion in 1995.

Northeast Asia

In **Northeast Asia**, real growth is expected to accelerate to 3.6 percent. Inflation, however, is expected to fall to 2.5 percent.

In the **PRC**, the rapid growth of exports and moderate growth of fixed investment and private consumption is expected to support an increase in real GDP of 10.2 percent in 1995. Reflecting the increase in investment, value added in agriculture is expected to increase by around 4 percent in 1995, while industry continues on a stable growth trend. Inflation, while decreasing gradually, is still at a very high level and is expected to average about 15 percent for 1995 as a whole. As for trade, exports and imports in 1995 are expected to increase by 30 percent and 21.4 percent, respectively, resulting in a trade surplus of US\$17 billion. Real GDP growth for 1996 is projected to be 9.5 percent.

In Hong Kong, the fundamentals of the economy remain strong. For 1995 as a

whole, the forecast for real growth is 5.0 percent. Investment in machinery and equipment is also likely to maintain significant growth. The unemployment rate rose from around 2 percent in 1994 to 3.5 percent in the three months ending August 1995. This should help relieve pressures on wages and rentals, and hence help ease the cost of doing business in Hong Kong. Inflation has been moderating in recent months. For the first eight months of 1995, inflation averaged 9.0 percent, very close to the forecast of 9 percent for the whole year.

Exports of both goods and services are expected to remain buoyant. The visible trade deficit in 1995, though still relatively large, should be offset substantially by the on-going surplus on invisible trade.

In Japan, the very slow recovery phase was further affected, in 1995, by the Great Hanshin-Awaji Earthquake in January and the rapid appreciation of the yen during the early part of the year. As a result, the economy became stagnant and even showed signs of a weakening trend toward mid-year. In view of the circumstances, a series of economic measures was announced, the most recent being the Economic Measures announced in September, which includes a large fiscal stimulus package. Monetary policy has also been active with the official discount rate being cut in April and September. The steady implementation of these measures is expected to reduce the uncertainty surrounding the future of the economy and lead the economy to a more steady recovery. The real growth rate is expected to pick up in the remainder of FY1995-1996 and the inflation rate to hold stable, due in part to the improved terms of trade. The surplus on the current account should shrink, due to the major increase in imports reflecting the improved terms of trade and the recovery of domestic demand and, further, the growing deficit on the invisible trade balance.

In the **ROK**, the economy continued its upward momentum throughout the first half of 1995. However, in the latter half of 1995, the pace of growth is expected to slow down slightly, reflecting the slowing of equipment investment. For 1995 as a whole, real growth is expected to be around 9 percent. The decreased growth rate of equipment investment is expected to contribute to slowing of growth in capital goods imports, which have been a key factor in the trade deficit. By contrast, exports are expected to grow rapidly due to the sustained growth of the world economy. Nonetheless, the current account deficit is expected to widen to around US\$8 billion. Inflation is expected to fall to 5 percent this year, if prices for agricultural products continue to maintain their current low levels. As for 1996, progress in capital account liberalization is expected to lead to the appreciation of the

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Korean won which, in turn, is expected to moderate economic growth to around 7 percent. Inflation is projected to remain at about 5 percent.

In **Chinese Taipei**, underpinned by a strengthening global recovery, increasing Asia-Pacific intra-regional trade, and various domestic pro-growth economic programs, the economy has performed well so far in 1995 and is expected to continue this good performance in the near future. Real growth is expected to reach 6.6 and 6.8 percent in 1995 and 1996, respectively. However, inflation, which is expected to be 3.9 percent in 1995, has given some cause for concern. In order to head off any threat of serious inflation, strict targets for growth of the monetary aggregates have been set. The surplus on the current account is expected to contract further due to the increase in imports, primarily of capital goods.

Southeast Asia

In **Southeast Asia**, real growth is expected to be 7.7 percent, about the same as in the previous year. Inflation will be 6.4 percent, also about the same as in the previous year.

In **Brunei Darussalam**, progress in reducing dependence on oil is expected to result in higher real growth of 2.0 percent in 1995. Along with this, inflation will rise slightly to 3.2 percent. Growth in both exports and imports will be strong and the surplus on the trade balance will remain about the same as in 1994.

In **Indonesia**, an increase in fixed capital investment and export growth is anticipated to slightly increase real GDP growth in 1995. Along with this, inflation will also rise slightly. The deficit on the current account is expected to grow due to higher imports and an increase in payments of investment income.

In **Malaysia**, high real growth, similar to the previous year, is expected in 1995. The unemployment rate will fall further to 2.8 percent and a state of full employment will continue. Inflation is expected to be held below 4 percent. The deficit on the current account is expected to remain high in spite of strong exports, due mainly to the increasing deficit in the services account.

In the **Republic of the Philippines**, economic recovery is expected to proceed at full steam; real growth should rise to 5.6-6.0 percent in 1995, primarily due to strong private investment. However, since the gap between demand and supply in the labor market is large, there will only be a limited fall in the unemployment rate. Inflation, on the other hand, is

expected to decline as a result of the slower growth in the money supply. Exports are expected to accelerate and the trade deficit is projected to decline slightly. With continued strong performance on invisible trade, the current account deficit is also expected to fall relative to GDP.

In **Singapore**, real growth in 1995 is expected to moderate to the 7 to 8 percent range due to weaker external demand and sluggish domestic demand. The unemployment rate, however, is projected to remain low. Inflation, on the other hand, is expected to fall in response to the more moderate growth.

In **Thailand**, private consumption and private investment are holding on trend in 1995, while government investment and exports are expanding significantly. Despite some difficulties in the agricultural sector due to flooding, overall economic performance is still healthy with real growth rate of 8.6 percent expected in 1995. It is expected that inflation will be 5.2 percent in 1995. The current account deficit is expected to increase slightly to 6.1 percent of GDP.

Oceania

In **Oceania**, real growth will fall slightly to 4.1 percent. Inflation will climb to 3.6 percent.

In Australia, economic growth is expected to ease in FY1995-96 to around 3 3/4 percent as a result of firmer macroeconomic policy settings as well as the natural slowing that occurs as the cycle matures. The forecast strength of activity is expected to sustain further reduction in unemployment. Inflation is expected to improve to 3 1/2 percent by the end of FY1995-96, reflecting stable interest rates and continued modest cost pressures. Inflation is thus expected to remain low compared with previous cycles. The current account deficit in FY1995-1996 is forecast to improve, as a share of GDP, with export growth being boosted by increased rural production and continued strength in world demand and with import growth slowing in line with slower growth.

In **New Zealand**, real growth is moderating to more sustainable rates. However, consumption and investment remain relatively strong. Economic growth, coupled with greater labor market flexibility provided by the Employment Contracts Act, has boosted employment. Employment growth was 4.9 percent for year-ended June 1995, while unemployment fell to 6.3 percent. Firm monetary conditions have kept inflationary

pressures relatively low. Headline inflation rose to 4.6 percent for the year to June 1995, and underlying inflation (which excludes interest rate effects and government charges) rose to 2.2 percent.

In **Papua New Guinea**, where production in the mining sector is expected to continue to contract, a negative real growth is anticipated. Imports should decline, so the surplus on the current account should increase.

Section 3. Features of Macroeconomic Performance in a Global Context

1. Role as "Global Center of Growth"

The APEC developing economies have been called the "global center of growth". It is true that these economies have maintained generally high growth since the 1980s and that their rates of growth are higher relative to other areas. However, is it only the relative high growth that is relevant here? Or is there more to it? Let us examine the significance of this "global center of growth".

Prerequisites for the High Growth

The high growth of the APEC developing economies was made possible by their adoption of a set of policies conducive to growth. These policies could be broadly divided into two groups.

Appropriate macroeconomic policies, the adoption of exchange rate regimes that supported export growth, and the reduction of foreign debts contributed to growth by restraining inflation and helping maintain reasonable external balances. Macroeconomic stability, in turn, created a favorable environment for private savings, private investment, and exports.

A number of additional policies contributed to growth by improving the efficiency of resource allocation. In the domestic arena, these included such policies as privatization of government-owned enterprises, deregulation of prices and interest rates, and other deregulation measures which removed unnecessary government intervention and allowed market mechanisms to operate more fully. In the external arena, these included the liberalization of trade and relaxation of restrictions on capital movement, policies that were outward looking and that promoted export-oriented economic growth.

Economic Growth Fueled by Exports and Foreign Direct Investment

The set of policies aimed at creating a stable macroeconomic environment and liberalizing economic activity enabled the APEC developing economies to strengthen

economic growth by attracting foreign direct investment and by expanding exports.

Since the 1970s, the exports of the APEC developing economies have enjoyed remarkable growth, increasing their share of global exports from 5.6 percent in 1972 to 8.8 percent in 1980 and on to 17.9 percent in 1993 (Table 1-3-1). Since the 1980s, APEC developing economies also saw their inward foreign direct investment increase faster than other developing economies (Chart 1-3-2).

The growth in exports and foreign direct investment created a favorable cycle, as can be seen in the case of the NIEs and ASEAN economies. First, the share of exports in real GDP (Table 1-3-3) has increased. It is high in Hong Kong and Malaysia, and in other economies as well. Second, the share of domestic investment in real GDP has risen as well. The share is high in all economies, especially in Singapore, Thailand, and the PRC. This high level of domestic investment is supported by high domestic savings rates but is also due in significant measure to the influx of foreign direct investment from other economies. A look at the ratio of foreign direct investment inflows to GDP shows that, for most of the economies, the ratio has risen (Table 1-3-4).

Increased Imports along with High Growth

The increase in foreign direct investment from other economies has strengthened the export competitiveness of the NIEs and the ASEAN economies, allowing them to increase their exports to fuel their economic growth. At the same time, however, these economies have promoted the growth of the world economy by increasing their imports from other economies.

The increase in imports from other economies was due, first, to the fact that the NIEs and ASEAN economies still generally require imports of capital and intermediate goods to sustain production of export goods. Second, the increase in imports was also due to the higher levels of income generated in these economies which boosted domestic demand. Private consumption, in particular, became more sophisticated (see Chapter 2, Section 3). Accordingly, imports of consumer goods have grown in recent years.

As a result of the increase in imports, the share of net exports in these economies' GDP gradually fell (Table 1-3-3).

Promotion of Growth of World Economy

Let us look at what kind of effects such exports to the NIEs and ASEAN economies have had on the exports and economic growth of the industrialized economies.

First, since the 1970s, exports of the industrialized economies to the NIEs and ASEAN economies grew faster than their overall exports (Table 1-3-5). Consequently, the share of the NIEs and ASEAN economies in the exports of the industrialized economies rose over the period. When viewed by economy, the NIEs and ASEAN economies account for a high share of the exports of Japan, Australia, New Zealand, and the United States. The same may be said for Europe.

Next, let us look at how much the increased demand of the developing economies has induced production in other economies, inclusive of the secondary effects. The multiplier matrix shows the extent to which an increase in the independent demand of an economy induces, through its imports, production in another economy (Table 1-3-6). This is a demand-driven approach which assumes a flexible supply-side response. It shows that, in economies like Japan and the United States, where domestic industries are broadly based, the rate of inducement of domestic production is high. It implies that, in such economies, an increase in demand tends to have a relatively small external effect. By contrast, in the case of the NIEs and ASEAN economies, the rate of inducement of domestic production is low, while the rate of inducement of production in other economies through imports is high. This shows that an increase in demand in the NIEs and ASEAN economies is particularly effective in inducing production in other economies, including in non-APEC regions.

The acknowledgment of the developing economies in the APEC region as the "global center of growth", therefore, not only recognizes their relatively high growth, it also recognizes that their economic growth tends to provide stimulus to the growth of the others.

2. Semi-synchronization of Business Cycles

In Sections 1 and 2, we examined the macroeconomic trends in the economies of the APEC region. The region has experienced a deepening of economic interdependence as a result of the expansion of trade and foreign direct investment (see Chapter 2). This deepening could act to increase synchronization in the business cycles of the economies concerned by enhancing the transmission of cyclical movements to others. Since the 1970s, a certain degree of synchronization can be observed in the business cycles of the main industrialized economies. Here, we will examine the extent to which such synchronization of business cycles can be seen in the APEC regional economy.

Regional Comparison of Business Cycles

Although there is extensive analysis concerning the dating of business cycles in some economies, most economies in the APEC region do not, in fact, announce the peaks and troughs of their business cycles. Therefore, to provide a basis for comparison of cyclical fluctuations in the region, a log-linear trend of real GDP for each economy was estimated for the 1980s, and the distance of actual real GDP for each year from the trend was taken as an indicator of the economy's position in its business cycle (Chart 1-3-7).

According to this, some synchronization of cycles can be observed in the region: (1) in North America, there has been a relatively high degree of synchronization between the U.S. and Canada; (2) in APEC Latin America, no synchronization of turning points can be observed; (3) in Northeast Asia, except for Japan, substantial synchronization could be viewed, although there were differences in the speed of economic growth; (4) in Southeast Asia too, except for Brunei Darussalam, there was a high degree of synchronization with all economies enjoying above-trend growth since the late 1980s; (5) in Oceania, synchronization has existed in Australia and New Zealand since the late 1980s.

When the APEC region is viewed as a whole, however, synchronization becomes harder to see. For the period between 1990 and 1993, in particular, there has been a notable difference between the APEC industrialized economies, which were below the trend, and the APEC developing economies, particularly Southeast Asia, which far exceeded the trend.

Reasons behind Semi-synchronization of Business Cycles

As we will see in Chapter 2, economic interdependence in the region has deepened, yet evidence of synchronization of business cycles can be seen only in sub-regions, and not in the APEC region as a whole. We will name the phenomenon "semi-synchronization" and investigate the factors contributing to it.

One way in which business cycles are transmitted to other economies is through the income effect on trade. Accordingly, greater economic interdependence should enhance synchronization. However, the analysis in Chapter 2 will reveal that economic interdependence has not deepened evenly in the region; some sub-regions have increased their interdependence more than others. This may partly explain the semi-synchronization, though a closer comparison of the patterns of interdependence and semi-synchronization shows that the two do not necessarily coincide. Therefore, other factors should also be taken into account.

Exchange rate fluctuation is another important factor that could dampen observed synchronization. For example, where one economy experiences a significant appreciation of its currency, other economies which produce substitutes for its goods stand to benefit by gaining international market share. On the other hand, economies which produce complements for its goods would experience weaker exports to that economy. This potentially non-symmetric impact of exchange rate fluctuations on different economies could be one of the factors that explain the relatively weak degree of synchronization in the APEC region, particularly in the late 1980s when exchange rates experienced significant fluctuations.

Other factors may also be operating behind the semi-synchronization phenomenon. (1) The economies in the region have proceeded with structural reforms since the 1980s as part of their efforts to combat structural inflation and to deal with debt crises. (2) The industrialized economies, in particular, have adopted floating exchange rates, which give them greater scope to pursue interdependently their own monetary policy objectives. (3) The APEC developing economies that have been export-oriented are also seeing a steady rise in domestic demand. These factors could have worked to offset the effect of deepening interdependence on synchronization.

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CHAPTER 2. STRUCTURE AND DEVELOPMENT OF ECONOMIC INTERDEPENDENCE

-----Overview -----

The economic growth and development of the APEC region has been accompanied by a deepening of economic interdependence among APEC member economies. Section 1 examines the growing interdependence from the perspective of merchandise trade and capital transactions; the role of movement of labor is briefly taken up in an appendix.

Section 2 explains two driving forces behind the deepening of the economic interdependence: the growth of foreign direct investment and internationalization of production; and the increased integration of financial markets and the development of international financial centers.

Section 3 discusses how the expansion of trade, the growth of domestic markets, and the changing motivation of foreign direct investment might affect economic interdependence in the future.

Section 4 analyzes the characteristic pattern of economic development in the APEC region, namely the "flying geese formation" type of development, where export-oriented foreign direct investment works to deepen economic interdependence. While this model suggests that the deepening of economic interdependence can be considered to be an offspring of this pattern of economic development, the relationship between economic development and interdependence is not however, a one-way relationship, as we will see in the next chapter.

Section 1. Current State of Economic Interdependence

The economic growth and development of the APEC region has been accompanied by a deepening of economic interdependence amongst member economies. Regional cooperation within the APEC framework is based on such economic interdependence. In

order to examine

the current state of economic interdependence, this section will look at the major international transactions, namely (1) merchandise trade, and (2) capital transactions. An appendix will also look briefly at the movement of labor.

1. Merchandise Trade

Deepening Interdependence

Growing economic interdependence in the area of trade implies an increasing significance of intra-regional trade in each individual economy. Let us look at this using the ratio of intra-regional trade to GDP (intra-regional trade/GDP, Attachment Table 2). Although there are fluctuations, it is possible to observe an overall increase in the ratio for the developing economies of the region since the mid-1980s.

To examine the factors behind this broad upward trend, this ratio may be further broken down into (1) the ratio of trade to GDP (trade/GDP), and (2) the ratio of intra-regional trade to total trade (intra-regional trade/trade). It can be seen that, for both exports and imports, for most economies, the two ratios have been on an upward trend since the mid-1980s. Both ratios have contributed to the rise in the intra-regional trade to GDP ratio.

The rise in the ratio of trade to GDP since the mid-1980s is largely due to the adoption of outward-looking policies in the developing economies that place trade particularly exports at the centerpiece of economic development strategies. On the other hand, the upward movement of the ratio of intra-regional trade to total trade since the mid-1980s is largely due to the economic development in the region and to the increased foreign direct investment in the region which, in turn, encouraged intra-regional trade. (See Section 2)

The rise in the ratio of intra-regional trade can be examined using an intra-regional trade matrix (Chart 2-1-1, Attachment Table 3). This matrix shows the average ratio of intra-regional trade in the APEC region for two periods, 1981-83 and 1991-93. According to the data, the ratio of intra-regional trade, both for exports and imports, for the whole APEC region was already high in 1981-83: 60 percent for exports and 61 percent for imports.

Moreover, the ratio rose further in the period up to 1991-93, increasing 9 percentage points for both exports and imports.

This increased intra-regional economic interdependence may be confirmed by the "intensity of trade" as well (Chart 2-1-2). The intensity of trade of an economy with a given trade partner is the share of that partner in its own total exports, adjusted for the partner's relative size of imports. It is an indicator for comparing the interdependence between two economies after removing the influence of size. If the value is more than one, it shows that interdependence is relatively high between the two economies. According to this, the United States has high interdependency with the other three groups of economies, excluding the PRC. ASEAN economies, the NIEs, and Oceania have a high degree of interdependence with the other three groups, excluding Canada, Mexico, and Chile. It is the same in the case of Japan. These observations show, in general, interdependence is high within the region. Further, a comparison of 1993 and 1983 reveals that interdependency has deepened during the period. The value has risen in both exports and imports between the United States and Canada; Chile, and Mexico; in exports of ASEAN economies, the NIEs, and Oceania to the PRC; and in U.S. exports to Japan.

Regional Structure of Intra-Regional Trade

We will examine the regional structure of intra-regional trade in the APEC region by hemisphere, western and eastern (Attachment Table 3). With regard to exports, the following observation can be made.

First, there is a high degree of dependence on the overall APEC region for both hemispheres. In 1991-1993, 66 percent of exports from APEC's western hemisphere went to APEC partners and 72 percent of exports from APEC's eastern hemisphere went to APEC partners. Illustrating the depth of this interdependence, APEC's two largest economies, the United States and Japan, continue to be the largest economic partners of virtually every economy in the region, generating large trade and financial flows across the Pacific.

Second, the dependence on the APEC region rose significantly in the decade between 1981-1983 and 1991-1993 (10 percentage points for the west and 8 percentage points for the east).

Third, there is also a high interdependence within each of the hemispheres: in 1991-1993, 43 percent of exports from APEC's western hemisphere went to other APEC

economies in the western hemisphere; for APEC's eastern hemisphere, the corresponding figure was 46 percent. Interdependence within each hemisphere also rose between 1981-1983 and 1991-1993, by 6 percentage points in the west and by 8 percentage points in the east. Within the western hemisphere, interdependence was strengthened by the free trade agreement between Canada and the U.S., while within the eastern hemisphere, interdependence as a major international trader. It should be noted that the measure of interdependence in the eastern hemisphere has an upward bias due to the significant role of Hong Kong and Singapore as entrepots for regional trade.

Fourth, the significant interdependence between the two hemispheres has also been maintained or has risen over the period: between 1981-1983 and 1991-1993 it rose by 4 percentage points to 24 percent for the west and remained at 26 percent for the east.

With imports, similar observation can in general be made.

First, there was a high dependence on imports from the APEC region for both hemispheres: in 1991-1993, 69 percent of imports by APEC's western hemisphere came from APEC partners; for APEC's eastern hemisphere, the corresponding figure was 72 percent.

Second, the high dependence on the APEC region has also risen in the decade between 1981-1983 and 1991-1993 (by 8 percentage points for the west, and 10 percentage points for the east).

Third, there was a high interdependence within each of the hemispheres in 1991-1993 (35 percent of the imports of APEC's western hemisphere came from other APEC economies in the western hemisphere; for APEC's eastern hemisphere, the corresponding figure was 52 percent). The high interdependence within each hemisphere has also been maintained or has risen over the period between 1981-1983 and 1991-1993 (no change in the west, and a rise of 11 percentage points in the east).

Fourth, the significant interdependence between the hemispheres rose overall during the decade between 1981-1983 and 1991-1993, with an increase of 8 percentage points to 34 percent in the west more than offsetting a marginal decline of 2 percentage points to 20 percent in the east.

These findings can also be confirmed by the aforementioned "intensity of trade". Note must be taken, however, of the fact that, even in 1991-1993, the absolute level of the PRC's trade ratios was still low despite the significant structural shift in trade caused by the PRC's emergence as a trading economy. In fact, the ratio of APEC member exports to the PRC was 5 percent, while the ratio of APEC member imports from the PRC was 7 percent. In terms of the absolute ratio, the United States and Japan are higher in both exports and imports.

Structure of Intra-Regional Trade by Product

Next, let us look at the structure of intra-regional trade by product.

The product composition of exports and imports has changed in recent years (Attachment Table 4). From 1985 to 1993, the share of primary products dropped in many economies both in exports and imports, partly reflecting the decline in commodity prices during the period. This was offset by an increase in the share of manufactured goods. In particular, for APEC developing economies, the share of capital goods rose in exports and the share of capital and consumer goods rose in imports. Similarly, in the APEC industrialized economies, the share of capital goods rose in exports and the share of capital and consumer goods rose in exports and the share of capital and consumer goods rose in exports and the share of capital and consumer different goods rose in imports. This hints at an internationalization of production through foreign direct investment and a resultant growing intra-process division of labor.

This greater sophistication seen in the structure of trade suggests that trade in the APEC region is evolving from a pattern that reflects a "vertical" division of labor in the production process amongst APEC partners, to one that reflects growing intra-industry and intra-firm trade. This shift can be confirmed by the index of intra-industry trade (Table 2-1-3). It can be seen that over the period 1979-1988, the ratio of intra-industry trade rose in the APEC region, both in the industrialized economies and in the developing economies. Of particular note is the high level reached by some economies such as Malaysia (almost 55 percent) and the ROK and Chinese Taipei (both at about 41 percent). It should be noted that the very high figures for Hong Kong and Singapore (over 70 percent in each case) reflect their role as entrepots for the PRC and ASEAN economies respectively, and the consequently high relative weight of re-exports in their export statistics. It is also noteworthy that the ASEAN economies saw steep increases in their ratios over the period.

Factors Affecting the Structure of Intra-Regional Trade

The structure of economic interdependence as we have seen is an outcome of

interaction among various factors. The most basic factors are the impact of income growth, and the impact of relative price changes. These two will be examined in turn.

As we have seen in the previous chapter, the APEC developing economies have experienced high growth of income relative to others. Assuming similar income elasticities of exports for all economies, exports to these economies would grow faster than exports to others. In the case of Japan, income elasticities of exports to ASEAN and NIEs are higher than those of total exports [Attachment Table 5 and 6 (1)]. This may be attributable to the high share of capital goods in the exports to these economies. The effect of the high elasticities is that growth of exports to these economies is faster, even after taking into account the high growth of income. Similar information on income elasticities of other economies would be valuable in further deepening the understanding of the roles of income growth in enhancing intra-regional trade.

Relative prices affect the pattern of trade through the price elasticities of exports and imports. These price elasticities are influenced by various factors.

One factor that would affect the observed price elasticity of exports may be the internationalization of production through foreign direct investment and the associated increase in intra-firm trade resulting from the intra-process division of labor. To the extent that the growth of intra-firm trade is mainly due to the supply of capital and intermediate goods for local processing and assembly, whose substitutes may be limited due to quality considerations, this could work to reduce observed price elasticities for exports as a whole. On the other hand, an increase in the share of exports of consumer goods, which have higher price elasticities, would work in the opposite direction.

Thus, although the deepening interdependence within the APEC region, which is associated with growing sophistication of industrial structures and pattern of consumer demand, may be expected to affect price elasticities of exports, it is not possible to say, *a priori*, in which direction the net effect will be. Moreover, this could vary by economy.

An interesting example of the way in which such structural changes may have affected export and import price elasticities is furnished by Japan. The evidence shows that Japan's export price elasticities have fallen [Attachment Table 6 (1)]. In particular, the price elasticity of capital goods is lower than for total exports [Attachment Table 7(1)]. This would seem to reflect the role of foreign direct investment inducing intra-firm trade. On the other hand, the price elasticity of imports has risen, which is consistent with the rising share of price-elastic consumer goods in imports [Attachment Table 8 (1)].

The changes in export and import price elasticities that have taken place in Japan since the late 1980s have thus worked to dampen the effect of price changes on exports and to reinforce their effect on imports. It should be noted, however, that the current level of price elasticities for exports and imports in Japan are roughly of the same magnitude. This implies that, at present, a given change in the exchange rate would affect Japanese exports and imports by roughly the same percentage.

The possible changes in the structure of price elasticities for exports and imports would be of particular significance given the movements in exchange rates in the region. Most APEC developing economies try to stabilize their currency vis-à-vis the U.S. dollar or a basket of currencies (Table 2-1-4). Accordingly, while the yen has fluctuated significantly vis-à-vis the U.S. dollar, the currencies of most of the APEC developing economies have been relatively stable vis-à-vis the U.S. dollar. In terms of real effective exchange rates, which are indexes of trade-weighted exchange rates adjusted for differences in rates of inflation (Chart 2-1-5), the trends since mid 1980s have been towards an appreciation of the yen, NIEs' currencies, and the Chilean peso and towards a depreciation of the U.S. dollar, ASEAN currencies, and the renmimbi. Such exchange rate fluctuations should have restrained exports and encouraged imports for economies whose currency appreciated. The inverse would apply for economies whose currency depreciated.

2. Capital Transactions

Structure of Capital Account Balance

The structure of capital transactions in the APEC region can be examined using the capital account in the international balance of payments (Chart 2-1-6). Countries with high rates of domestic saving relative to investment will show current account surpluses and be net exporters of capital. These capital outflows will reflect the tendency of capital to seek the higher rates of return available abroad. The net flows reflect, of course, the balance of inflows and outflows which are often much larger than the net flows and provide a richer picture of the inter-relationships amongst economies as both importers and exporters of capital.

Viewed by region, economies that have maintained a net outflow have been Japan, and to a lesser extent, Chinese Taipei and New Zealand. The United States had net outflows between 1980 and 1982, but has since recorded net inflows. Mexico, the ROK, and Malaysia recorded net outflows in the mid-1980s, but have been net capital importers since then. Other regions have basically been net importers of capital. A recent development has been the continued growth in net capital imports of the APEC developing economies in Asia. Viewing the APEC region as a whole, Japan stands out as a major supplier of capital in the region in net terms.

The breakdown of the regional capital account highlights a number of interesting changes in regional capital flows (Chart 2-1-7).

Foreign direct investment accounts for a large part of the capital supplied from Japan, but has recently been declining. In its place, portfolio investments have increased.

The supply of capital to North America comprises both portfolio investment and, to a lesser extent, foreign direct investment. The foreign direct investment to North America has turned to net outflow in the early years of the 1990s. While North America is a net borrower overall, it is also a significant supplier of risk capital to the APEC region.

In the supply of capital to APEC Latin America, private loans, once high in share, have declined. In their place, there has been a striking inflow of portfolio investment. Foreign direct investment also has gradually expanded.

In Northeast Asia (excluding Japan), there has recently been a rapid increase in the inflow of portfolio investment in addition to an increase in foreign direct investment.

In the supply of capital to Southeast Asia, a recent trend has been an increase in bank loans on top of foreign direct investment. In the case of the Southeast Asia economies, the weight of official loans is relatively high compared to other economies.

Structure of Intra-Regional Transactions

We next address the share of capital transactions of the APEC region that is accounted for by intra-regional transactions. The available data on capital transactions among the economies of the APEC region is extremely limited. We will accordingly examine only the capital transactions of the United States and Japan for which a regional breakdown of capital transactions is available so as to obtain a glimpse into the movement of capital in the APEC region (Charts 2-1-8 and 2-1-9). First, let us examine the net flow of long-term investment (change in net long-term

external position). Over the period, the basic pattern was for the United States to see a net inflow, and for Japan to see a net outflow. Both economies, however, experienced some irregular movements between 1989 and 1991. In the United States, there was a net outflow in 1989 and 1991. In Japan, the net outflow grew sharply in 1989, shrank in 1990, and turned into a net inflow in 1991.

Looking at outward long-term investment (net change in long-term external assets) and inward long-term investment (net change in long-term external liabilities) separately, we find that, in the United States, inward investment has, with the exception of 1991, consistently been positive. However, outward investment has been more volatile; it was large and positive until 1989, but has trended down since, turning negative in 1992. The net inflow in total capital transactions of the United States in recent years is a result of a change in both outward and inward investments. On the other hand, we find that, in Japan, outward investment has consistently been positive. Inward investment has been roughly in equilibrium for most of the period, but experienced a large fluctuation between 1989 and 1991, which showed up in the net flow of total capital transactions.

Next, let us look at the regional structure of the net capital transactions of the two economies. In the United States, the net inflow from other regions (primarily Western Europe) has been growing. There has been a net inflow of capital from Japan and other economies in the APEC region as well, but this has remained fairly level. In Japan, the share of net outflow to the United States is large. Capital is also flowing out to other regions (primarily Western Europe), but this has also remained level. As this suggests, the weight of intra-regional transactions differs depending on the economy. It should be noted also that the intra-regional transactions of these two economies are mainly transactions with industrialized economies in the region. The fact that the transactions with the developing economies in the APEC region are not that significant is surprising, given the FDI statistics that suggest strong inflows to these economies.

Turning to the capital transactions among the developing economies in the region, there is a deepening interdependence in capital transactions among these economies. Good examples are the foreign direct investments made by Chinese Taipei and the ROK in the PRC, ASEAN economies, etc. The growing capital transactions among these economies are taking place directly and also indirectly through intermediaries in Hong Kong and Singapore, which have emerged as major international financial centers.

The structure of the capital balance will be examined next.

(1) Foreign Direct Investment

Trends in Intra-Regional Investment

Foreign direct investment in the APEC region, both outward and inward, has grown tremendously. A comparison of 1980 with 1992 shows that the accumulated stock of foreign direct investment by the APEC region in the world has increased approximately 3.7-fold. The accumulated stock of foreign direct investment by the world in the APEC region has risen about 4.6-fold in the same period.

To examine the trends in foreign direct investment by region, let us look at the foreign direct investment matrix on an accumulated stock basis (Chart 2-1-10, Attachment Table 9). A comparison of 1980 with 1992 shows that the ratio of foreign direct investment from the APEC region to other areas within the region, compared against investment from the APEC region to the world, has risen significantly (from 41.4 percent to 51.4 percent). In other words, the APEC region has become the most important destination for foreign direct investment from APEC members. Contributing to this was the rise in the ratio of investment from the APEC region to North America, the PRC, and the NIEs. The rise in the ratio of investment to the United States, the PRC, and Hong Kong was particularly large.

In the same period, the ratio of foreign direct investment from APEC into the region versus investment from the world to the region also rose (from 50.3 percent to 52.2 percent). In other words, the APEC region has also become the major provider of foreign investment to member economies. A major contributing factor to this was the rise in the ratio of investment from Japan and the NIEs (in particular Hong Kong). Looking closer, it is evident that these changes in ratios were due mainly to the growth in foreign direct investment from Japan to the United States, from Japan to the NIEs and Oceania, and from Hong Kong to the PRC.

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Factors behind Foreign Direct Investment

There have been various patterns in the flow of foreign direct investment in the APEC region. These include flows among industrialized economies, among developing economies, and between industrialized and developing economies.

It has been suggested that foreign direct investment to industrialized economies is made mainly to establish bases for production and sales, with the aim of marketing products in the host country; that is to say, of the "market-securing type." In contrast, foreign direct investment to developing economies is associated with a transfer of labor-intensive production processes to low-cost locations as firms seek to gain export competitiveness. In other words, it is of the "cost-pursuing type."

The case of Japan provides an interesting insight into this issue. To elucidate the point mentioned above: foreign direct investment functions are estimated for the outward foreign direct investment of the Japanese manufacturing sector. The explanatory variables employed are (1) the host-economy market factor (real GDP of the host economy); (2) the exchange rate factor (real effective exchange rate); and (3) the domestic profitability factor (current profit) (Attachment Table 10).

The results show that, in the case of foreign direct investment to North America and to Europe, the coefficients of the host market factor and domestic profitability factor were significant, while the coefficient of the exchange rate factor was not. In contrast, for foreign direct investment to Asia, the coefficients of the host economy market factor and domestic profitability factor were not significant, while the exchange rate factor was.

The results of this estimation may be considered as substantiating the view that foreign direct investment into industrialized economies is of the "market-securing" type whereas that into developing economies is of the "cost-pursuing" type.

The factors mentioned above cannot, of course, fully explain why in the low-cost Asian region a certain economy is actually chosen as a host of foreign direct investment. The choice would depend on various factors, including quality and transparency of the legal system, stock and quality of infrastructure, availability of supporting industries, and educational and skill level of the labor force.

(2) Bank Loans

A number of factors have tended to diminish the banking sector's direct role in

financial intermediation in recent years. These include the introduction of more stringent capital

requirements, progressive financial market deregulation, the impact on many banks' balance sheets of asset price deterioration, and the structural shift of savings from bank deposits to other forms of investment. This diminished role may account, at least in part, for the trends described below.

Trends in Intra-Regional Loans

A look at the trends in bank loans in the international balance of payments (Chart 2-1-7) shows that there is a considerable regional difference. There has been a fairly consistent net inflow into Southeast Asia and Oceania; where banks continue to play a role in meeting the demand for funds. There has been a net outflow since 1985 from APEC Latin America which, prior to then, used to attract a significant net inflow. In contrast, there has generally been a net outflow from North America, except for the years 1990 and 1991. The net outflow from Japan which was usually the case in the 1980s shrank and even reversed after 1990.

Bank Loans from Industrialized Economies

Only limited data are available for studying the regional trends in bank loans. Therefore, let us first investigate the destinations of U.S. and Japanese bank loans based on data on assets of American and Japanese commercial banks (Attachment Table 11). The regional structure of U.S. and Japanese bank lending to developing economies appears to reflect geographical and/or historical ties, with most developing-economy loans from U.S. banks going to Latin America and most developing-economy loans from Japanese banks going to Asia.

A look at the borrowers of bank loans (from statistics of the Bank of International Settlements) reveals that, in the 1990s, bank loans from the industrialized economies (economies reporting to the BIS) to the developing economies (economies other than those reporting to the BIS) in Latin America, Eastern Europe, and other areas have declined, while those to the developing economies in Asia have gradually increased (Attachment Table 12). Bank loans from the United States and Japan to the developing economies of Asia, however, have stagnated; thus, the increase in bank loans to the Asian developing economies may be due to an increased supply of bank loans from the EU.

Bank Loans among Developing Economies

On the other hand, an increase was seen in bank loans from Hong Kong to the East Asian developing economies (Attachment Table 11). The reason for the increase may have been the increased loans made in the Asian region by Hong Kong and Singaporean affiliates of banks of the industrialized economies. It is also considered to be the case that the banks of the East Asian developing economies increased loans to the region, which should have contributed to raising the share of intra-regional transactions in bank loans.

(3) Portfolio Investment

"Securitization" of Capital Transactions

The "securitization" of capital transactions is a global phenomenon. In line with this trend, the ratio of portfolio investment to total outflow or inflow of capital of the APEC economies is rising (Chart. 2-1-7). This has been particularly notable in APEC Latin America since 1990, where the form of securities has included country funds, American Depository Receipts (ADRs), and other means. There has also been an increasing inflow of portfolio investment into East Asia.

Several factors are behind the growth in portfolio investment in the developing economies. First, there was a general easing of regulations governing the procurement of external funds against the background of the still-underdeveloped state of financial markets in these developing economies. Second, an improvement in the macroeconomic performance and debt situation of a number of developing economies was an important factor in improving these economies' access to international markets, including the Eurobond market. Third, the availability of bank loans from the United States and Japan declined, reflecting balance sheet problems related to asset price declines. Fourth, there was a structural shift of savings away from bank deposits reflecting, *inter alia*, aging populations seeking higher returns on retirement savings. Fifth, the sluggish economic conditions and low interest rates in the industrialized economies in the early 1990s increased the relative attractiveness of the high-growth developing economies as destinations for portfolio investment. And, finally, the ascension of Hong Kong and Singapore as major international financial centers in the region improved the efficiency of regional financial markets in mobilizing capital.

Intra-Regional Bond Investment

A look at the procurement of funds by Asian economies from the international financial markets shows that there has been an increase in the flotation of foreign bonds and Eurobonds, particularly since 1993, and that subscribing investors include those from the Asian developing economies (Chart 2-1-11). One of the manifestations of this has been the sharp rise in "dragon bonds" (Eurobonds floated in Asian markets other than Tokyo). In other words, funds are being raised and put to use through the financial markets in Asia, thus stimulating intra-regional capital transactions.

One of the reasons behind this has been deregulation, which has made it easier for companies in developing economies to issue bonds on the international financial markets. Another factor facilitating the increased flotation of bonds has been the improved international dissemination of information on the ratings of the companies of the developing economies, which has reduced the information costs for investors.

The use of international markets by bond issuers in the region, however, is still for the most part limited to companies and authorities in just a handful of economies such as the PRC, Hong Kong, and Singapore. The markets in which these bodies float their bonds are mainly the European markets; the Asian markets still play only a minor role. While intra-regional procurement of funds using bonds is increasing, it is still basically used for dealing with marginal demand for funds.

Intra-Regional Stock Investment

Since the 1980s, especially in 1992 and 1993, the stock markets of Hong Kong, Singapore, and other Asian developing economies have been very active. The numbers of companies listed has increased, and the market capitalization has skyrocketed. This reflects the growing accumulation of domestic investment funds as well as the increasing inflow of external funds. The latter inflow has been facilitated by the establishment of "country funds" (investment trusts set up for the purpose of investing in stocks in a specific economy) in the industrialized economies and by the deregulation of stock market investments in the developing economies themselves. The amount of shares issued by the Asian developing economies on the international markets, however, is estimated to have reached only US\$5.3

billion in 1993 (according to an IMF survey), which is only approximately one-third of the bonds floated by these economies.

Recent Trends

Starting in 1994, the inflow of private capital to the developing economies declined due to a number of factors, including strengthening economic growth and the attendant rise in interest rates in most industrialized economies. The drop in the inflow of funds in the form of loans was striking, and the inflow of funds to the stock markets fell as well. Accordingly, the stock markets of the Asian developing economies entered a period of readjustment in 1994. The Mexican crisis in late 1990 also worked to heighten investors' caution. Accordingly, even though markets' expectations of further increases in interest rates have fallen over the course of 1995, investors seem to have reduced the flow of private funds not only to Latin America, but to the Asian developing economies as well. In early 1995, there has, in fact, been a sharp drop in bonds floated in Asia.

(4) Flow of Official Funds

Recent Trends

An overview of the flow of official funds [Official Development Assistance (ODA) and Other Official Flows (OOF)] in the APEC region shows that these funds are steadily increasing in absolute terms, but have been falling in recent years in terms of their share of capital transactions (Chart 2-1-7).

The economies in the region may be grouped into (1) industrialized economies acting as fund suppliers, such as Japan, the United States, Australia, Canada, and New Zealand; and (2) developing economies receiving those funds, such as the PRC, Indonesia, the Republic of the Philippines, Thailand, Papua New Guinea (mostly ODA), Mexico, and Chile (mostly OOF). Among the developing economies in APEC, however, there are also (3) economies which have switched from recipients of funds to repayers of borrowed funds, such as the ROK and Chinese Taipei, and (4) economies such as Hong Kong, which are receiving funds, but are repaying them at the same time so that they are virtually achieving a balance in net terms. Further, (5) economies such as Singapore and Malaysia are emerging which are receiving funds, but at the same time are also supplying them.

Intra-Regional Ratio

A breakdown of the funds supplied by donor economies shows that there has been an increase in the supply of funds, primarily ODA, from all donors.

A breakdown of the funds received by the beneficiary economies also shows a general increase in the amount of official funds everywhere, but with some economies (in particular the lower per-capita income economies such as the Republic of the Philippines, Indonesia, and the PRC) obtaining a relatively higher share of this inflow. Further, funds from within the APEC region have been increasing as a whole (Chart 2-1-12). In the case of Japan, over 50 percent of the funds goes to the APEC region. The ratio of funds received from within the region versus total funds received is high in Asia and Oceania and low in APEC Latin America. Within Asia, the share of funds from APEC is rising in Singapore, Thailand, Indonesia, and Malaysia and is falling in the Republic of the Philippines and the PRC.

Appendix - Movement of Labor

Movement of labor is noteworthy as one of the factors of deepening economic interdependence, along with merchandise trade and capital transactions as discussed earlier.

Recent Trends

Until the 1970s, the movement of labor in the APEC region consisted of movement from the Asian developing economies to the industrialized economies of North America and Oceania. This flow of labor then turned to the Middle East.

Since the 1980s, the Middle East has fallen in relative share, and the share of developing economies in Asia has risen. In particular, economies like Singapore, which had been reluctant to allow in foreign workers, began accepting them.

There have also been changes in the economies that suppy labor. A big change was of the shift from suppliers to importers of labor by the ROK and Chinese Taipei. Thailand and Malaysia also appeared among the list of economies to receive labor, while continuing to supply it as well.

More recently, the movement of specialized and management type of labor has been growing. In many cases, it flows in the opposite direction to the unskilled and semi-skilled labor force. APEC industrialized economies, as well as Chinese Taipei, Hong Kong, and Singapore may be counted among the suppliers of these types of workers. Hong Kong is a destination of semi-skilled as well as specialized and management type of labor.

Possible explanation of Movement of Labor

The following factors may help explain the observed patterns of this movement of labor.

First, there is the supply-push factor. This is the continued existence of the unemployed and underemployed and the relatively low level at which wages remain in many developing economies even in the context of continued strong growth. Such economies frequently are ones in which the young comprise a large proportion of the labor force and the labor force itself is growing at a high rate.

Second, there is the demand-pull factor, or the tightening up of the labor market and the relative rise in wages in the midst of continued high growth. Moreover, the labor force of economies experiencing such high growth frequently grows by a lower rate and undergoes aging. This also may be considered to contribute to the tight supply and demand relationship in the labor market.

Combining these factors, we can surmise that labor would tend to migrate from economies with a supply-push factor to ones with a demand-pull factor. Not everything can be explained by this, however. In particular, the recent characteristic two-way movement of labor cannot be explained by these macroeconomic factors alone.

Accordingly, it is necessary to consider the "mismatch" factor of the labor supply as seen by type of job. This includes a "developing economy type mismatch" as seen in the developing economy where there is a shortage of skilled or specialized and managerial labor required by subsidieries of foreign companies; and an "industrialized economy type mismatch," where there is a shortage of labor in some unskilled jobs due to the increasing sophistication of the structure of the labor supply and demand, along with the increasingly advanced industrial structure. In both cases, labor migrates to the jobs where there are shortages of workers; in the former case from the industrialized economies, and in the latter case from the developing economies.

Section 2. Driving Forces behind Deepening Economic Interdependence

Two driving forces behind the deepening economic interdependence seen above have been the growth in foreign direct investment and the integration of financial markets. These two factors are discussed in this section.

1. Growth of Foreign Direct Investment and Internationalization of Production

Impact of Foreign Direct Investment

In general, foreign direct investment (FDI) is considered to have several types of effects.

The first is the increase of production and employment in economies receiving the foreign direct investment. The establishment of a new production base in the host economy, for example, would tend to promote the economic growth of the host economy.

The second is the transfer of technology and managerial expertise often associated with the establishment of bases of production. This tends to support a rise in the level of technology and an improvement of technical development capabilities in the host economy.

The third is the growth of trade, primarily on an intra-firm basis, between the investing economy and the host.

In addition, foreign direct investment tends to intensify market competition in the host economy.

The statements above should not preclude the possibility of a reverse causation. Better export performance and higher economic growth in the APEC region is considered to have contributed in attracting foreign direct investment into the region. In fact, the dynamism of the APEC developing economies lies in the virtuous circle among trade, economic growth, and foreign direct investment in the region.

There has been considerable work done in other contexts on the impact of FDI and it is of interest that some evidence in support of these propositions can also be adduced from the recent evidence in East Asia. For example, a rough correlation can be seen between foreign direct investment and economic growth in such economies as ASEAN and the PRC which supports the proposition that FDI tend to promotes growth (Chart 2-2-1). The increase in royalties paid by Japanese subsidiaries (Chart 2-2 2) suggests that the increase in FDI by Japan to East Asian developing economies since the late 1980s has been accompanied as

expected by an increase in exports of technology from Japan to them. Finally, if we add foreign direct investment as an explanatory variable when estimating the export-import function for Japan, the coefficient turns out to be significant. Moreover, the value becomes positive in recent years, indicating that it has a stimulating effect on trade [Attachment Tables 6(2), 7(2), and

8 (2)]. This would support the proposition that FDI increases trade.

Impact on Trade

Foreign direct investment has several effects on trade flows. From the viewpoint of the economy providing the foreign direct investment, there would be growth in exports to the host economy of the capital goods and intermediate goods required for the production activity of the local subsidiary (i.e. the export inducement effect). At the same time, the domestic sales and exports of the products now produced by a local subsidiary in the host economy would have the effect of replacing exports of these products by the investing economy (known as the export substitution effect). Moreover, some of the products now produced by the investment in the host economy are being exported back to the investing economy (known as the reverse import effect).

The net effect on the trade balance of the investing economy depends on the relative strength of the export inducement effect, which tends to increase exports, the export-substitution effect, which tends to reduce exports, and the reverse-import effect, which tends to increase imports. The export-inducement effect is great at the initial stage after an investment, but eventually dwindles as local procurement of capital and intermediate goods increases with the development of supporting industries. On the other hand, the export-substitution and reverse- import effects become greater as production in the new facilities gears up. Accordingly, we obtain the profile of the export-inducement effect dominating and increasing net exports in the short-term, but the export-substitution effect and reverse-import effect gaining strength and reducing net exports in the long-term. This is called the "J-curve effect of foreign direct investment." The "J-curve effect" for individual investments will not necessarily be visible in the aggregate statistics. When there is an on-going wave of investments into a region, the impact on the trade balance would tend to be dominated by the net longer-run effects.

The evidence supports the proposition that the foreign direct investment tends to increase trade between the investing and host economies in both directions. For example, following the establishment of NAFTA and the subsequent surge in foreign direct investment

by the United States in Mexico, there was an increase in U.S. exports of auto parts, integrated circuits, office equipment, and other capital goods and intermediate goods to Mexico, and a reverse flow of exports of passenger cars, television sets, and other finished goods from Mexico to the United States.

Similarly, a study of the trade relationship between the Southeast Asian economies and Japan reveals that an increase in foreign direct investment from Japan to these economies particularly in the field of electrical equipment has been accompanied by a rise in Japan's exports of capital goods and intermediate goods and growth in its imports of manufactured goods from these economies, especially electrical equipment (Chart 2-2-3).

For example, based on estimates of the impact of Japanese foreign direct investment on the intra-regional trade balance with North America (Canada and the United States) and Asia, including the non-APEC economies (Chart 2-2-4), we find that: (1) there was a large export-inducement effect caused by the rapidly increasing foreign direct investment in North America, but the export-substitution effect was even greater. In addition, since the start of the 1990s, the reverse-import effect has also been growing, so the foreign direct investment to this region has functioned overall as a surplus-shrinking factor. On the other hand, (2) the export-inducement effect has been greater than the export-substitution effect in Asia, but the reverse-import effect has been more than offsetting the difference, so that foreign direct investment to this region has also functioned overall as a surplus-shrinking factor.

Implications for Interdependence

These findings suggest two interesting points.

First, the findings are consistent with the differences in nature of the foreign direct investment of the two regions, which was pointed out earlier. The generalization made was that industrialized-to-industrializing FDI tends to be market-securing and that industrialized-to-industrialing FDI tends to be cost-pursuing. Both types enhance interdependence and have associated benefits as in the transfer of production and managerial technology, but the cost-pursuing type tends to have a greater visible impact on trade flows. The large export substitution effect of foreign direct investment from the APEC economies to North America, coupled with the small reverse import effect, substantiates the proposition that foreign direct investment in the region is of a market-securing type. The large reverse import effect of the foreign direct investment in Asia tends to support the proposition that foreign direct investment to that region is of a cost-pursuing type. Second, the findings have implications for the pattern of deepening interdependence in the APEC region. Even though foreign direct investment is producing the same surplusshrinking effect, the export substitution effect is greater in the case of North America while the reverse-import effect, which tends to induce greater visible trade flows, is greater in the case of Asia. The foreign direct investment by Japan, therefore, enhances interdependence in the eastern hemisphere. As seen in Section 1, with regard to exports, there is a trend toward increasing interdependence within each hemisphere. One reason for this may be differences in the nature of the foreign direct investment to the two regions.

Whether foreign direct investment by the U.S. has a similar feature is of interest and is a topic for further research. If foreign direct investment to industrialized economies, including Japan, is of the market-securing type and that to developing economies, including Latin America and Asia, is of the cost-pursuing type, then it would mean that FDI, by North America to APEC developing economies in Latin America and Asia, enhances interdependence both within the western hemisphere and across the Pacific.

2. Progress in International Financial Integration and Development of International Financial Centers

Progress in Financial Integration

While the sustained high growth of the East Asian developing economies continues to increase their demand for funds, some economies in the region, including Chinese Taipei, Hong Kong, and Singapore are becoming increasingly important suppliers of capital. Most of the East Asian developing economies, furthermore, are proceeding with deregulation of their FDI regimes and undertaking reforms of their domestic financial systems. Due to this, in recent years there has been notable growth in the financial markets, including the bond and stock markets, of the East Asian developing economies and growing linkage among financial markets. For example, the dragon bond market, which has been growing since 1993, helps bring together the NIEs supplying funds and East Asian developing economies borrowing them. This emerging financial integration manifests itself as an increase in intra-regional capital transactions, as seen in Section 1.

To assess properly this growing integration of the financial markets in the APEC region, let us examine whether interest arbitrage among some of the currencies in the region has grown stronger (Table 2-2-5). When examining the extent of interest arbitrage, one typically looks at the covered interest rate arbitrage. However, as many Asian developing economies have not yet set up a forward exchange market; examination by covered interest rate arbitrage is not possible. Accordingly, it was examined whether uncovered interest rate arbitrage could be verified between some of the currencies in the region.

In this analysis, it was assumed that (1) the investors are risk-neutral, (2) capital mobility is perfect, and (3) changes in exchange rates are subject to perfect foresight. The currency pairs which were examined were: (1) the U.S. dollar vis-à-vis the Hong Kong dollar, Singapore dollar, Korean won, and Thai baht; and (2) the Japanese yen vis-à-vis the same four currencies. Interest rates in currencies other than U.S. dollar or Japanese yen were converted to U.S. dollars or yen using actual exchange rates.

Breaking down the period under examination into (1) the years 1985 to 1989 and (2) the years 1990 to 1994, and checking the uncovered interest rate arbitrage, we found that in the majority of cases, both the mean and the standard deviation of the gap with the U.S. dollar and the Japanese yen shrank in the early 1990s, compared with the late 1980s. This rising correlation in interest rates is consistent with the proposition that progress is being made in the integration of the financial markets of the APEC region.

Development of International Financial Centers

The interdependence in capital transactions has been further promoted through the emergence of Hong Kong and Singapore as major international financial centers. These international financial centers not only act as intermediaries for investment within the region but also encourage investment inflows into the region.

First, let us examine the role of the Hong Kong banks. The Hong Kong market has been playing an increasingly important role as a financial intermediary for the economies in the region. A unique feature of the Hong Kong market is its propensity to raise funds in the international interbank market and release them into the non-banking sector. This point may be confirmed by examining the external position of Hong Kong banks (Attached Table 11). The liability side shows that the overwhelming proportion of the debt is to Japan, suggesting that Hong Kong banks are raising considerable funds in the interbank market from Japanese banks. On the other hand, the asset side shows that a significant percentage of the loans are to the APEC region.

The Hong Kong market is strong in fund operations. For example, it surpasses the Tokyo and Singapore markets in both the number and value of syndicated loans (Chart 2-2-6). The growing claims of Hong Kong banks to Japan are possibly due to the growing claims

arising from expanding exports from the East Asian developing economies to Japan. The valuation effect of the yen appreciation is also a factor.

Loans by Hong Kong banks to the East Asian developing economies, the PRC in particular, have steadily increased in recent years as well. Hong Kong banks regard the PRC as an important major site for fund operations on a par with ASEAN economies. Hong Kong's fund-raising abilities will become increasingly important to the PRC, due to, among other reasons, its huge demand for funds to build up its infrastructure.

Finally, the significant rise in the share of Japan in the books of Hong Kong banks during the 1980s deserves comment. It reflects the use by Japanese banks of Hong Kong as an offshore booking center for "circuit lending": under this practice, Hong Kong subsidiaries of the Japanese banks borrow funds from their parent banks in Japan in order to relend funds back to Japan. This type of operation reached its peak in 1990.

Let us next look at the evolution of the Singapore market. Until the 1980s, the Singapore market had been characterized by its relatively large procurement of funds from the non-banking sector. As a result of this, Singapore became as renowned for its fund-raising abilities as Hong Kong for its funding operations. In the early 1980s, however, Singapore began raising greater amounts of funds from the interbank market and strengthened its role as a supplier of funds to Indonesia, Malaysia, Thailand, and other nearby economies. While it still depends on the non-banking sector more than the Hong Kong market, when raising funds, the tilt of Singapore toward procurement from this sector has declined. Since the late 1980s, the Singapore market has further reinforced its function as an international financial center by setting up a financial futures market and recruiting fund managers.

In sum, Hong Kong and Singapore are, through their functions as international financial centers, handling an increasing share of transactions in the region particularly in terms of drawing on Japanese and Western financing to serve the growing demand for funds from East Asian economic development. They also function as centers for linking supply and demand within the East Asian developing economies.

Section 3. Direction of Change of Economic Interdependence

The economic interdependence in the APEC region, seen in Sections 1 and 2, can be expected to continue to deepen in the years ahead. At the same time, however, changes are likely to occur in a few areas reflecting (1) the expansion of trade opportunities, (2) the growth of domestic markets, and (3) the changing motivation of foreign direct investment.

1. Expansion of Trade Opportunities

Changes in Export Competitiveness in the Region

A major factor behind the export competitiveness of the APEC developing economies had been the low cost of labor and land. The situation has been changing, however, along with the rapid economic growth of recent years.

First, there has been a marked increase in wages in the region, particularly in the NIEs. For example, the rate of wage increases between 1983 and 1993 in local-currency terms has been high in most developing economies and particularly in APEC Latin America (Table 2-3-1). In the East Asian developing economies, all but Malaysia and Singapore showed double-digit increases.

However, it is more appropriate to compare wage increases on same-currency terms. In U.S. dollar terms, the rate of wage increases, for the same period, falls for most of the economies except Singapore and Chinese Taipei. The difference in the rate of wage increases between the two calculations is due to changes in nominal exchange rates. In most economies, exchange rates depreciated, which helped to offset the wage increase, hence the general reduction in wage growth when measured in U.S. dollar versus local currency. In the NIEs, whose currencies remained broadly flat, or even appreciated against U.S.dollar, the exchange rate movements helped to amplify the increase as measured in local currencies. As a result, the NIEs experienced the highest rate of wage growth in the region in U.S. dollar terms.

The increase in wages affects export competitiveness only after the effect of productivity increase is taken into account. In the NIEs and ASEAN economies, the relatively high wage growth was partly offset by the rapid improvement in productivity. Among those showing a relatively high increase in unit labor costs were the NIEs, Mexico, and the Republic of the Philippines. Among those showing a decline or a limited increase were the PRC, Malaysia, Chile and Thailand.

Next, it is clear that land prices and office rents have both risen sharply throughout the region, particularly in the NIEs. Land prices for manufacturing plants in the NIEs are about eight times those of Western levels, though still lower than in Japan. Further, a look at land costs by the location of offices of manufacturers shows that land in the NIEs is about 16 times more expensive than in the Western economies, and has reached about 70 percent of the level of Japan (Chart 2-3-2). However, rental fees for buildings in the NIEs are not so different from those in the Western economies and are equivalent to about 30 to 50 percent of those in Japan (Chart 2-3-3).

Initially, the APEC developing regions established their export competitiveness, particularly in labor- and land-intensive goods, thanks to their low wages, low land costs, and low rents. The rising wages and land prices, and changes in exchange rates, are changing the situation. In response, these economies have been turning over the more labor- and land-intensive goods to the less-developed economies, and shifting to more capital- and technology-intensive goods. The trade structures of these regions have accordingly become much more sophisticated over time.

Further Liberalization of Trade and Investment

APEC members will benefit in time from the expanded trade opportunities accompanying implementation of WTO commitments and the liberalization agreed at Bogor.

Estimates by the GATT, OECD/World Bank, and OECD show that the Uruguay Round will be a positive growth factor for the world economy (Table 2-3-4). For example, the GATT figures project the volume of world trade to be 23.5 percent higher in 2005 than would have been the case without the Uruguay Round liberalization. For the developing economies (excluding the PRC and Chinese Taipei) the impact is estimated to be 36.7 percent. For the PRC the impact is estimated to be 26.5 percent. It is also projected that global annual income will be US\$510 billion higher by the year 2005 than it would have been without the Uruguay Round liberalization. It is estimated that the income effect of the developing economies and transitional economies will reach more than 20 percent of this global figure. By the same token, further liberalization and facilitation of trade and investment by 2010/2020 which APEC aims to do would be beneficial not only for the APEC economies but also for the global economy. Quantitative studies of its effects are tasks for the future.

Competition from other Liberalizing Economies in the Global Market

Since the early 1990s, the liberalizing economies of India, Vietnam, Eastern Europe, and Latin America have increased competition in the global market. For example, India and Vietnam began significantly increasing their exports, primarily to Japan and other East Asian economies, creating competition for the NIEs and ASEAN economies. Moreover, India and Vietnam are being considered more frequently as alternatives to the ASEAN economies and the PRC as new sites for potential foreign direct investment from not only industrialized economies, but also from the NIEs and other sources.

These other liberalizing economies, however, also have a large role to play as new export markets and, therefore, can be expected to serve as major growth factors in the global economy, including for the economies in the APEC region.

2. Growth of Domestic Markets

Rise in Income Levels

As a result of the recent rapid economic development, levels of income in the economies of the APEC region have risen.

Let us look at this in terms of the trends in per-capita GDP since the 1970s (Table 2-3-5). The developing economies with the most striking rise in per-capita GDP in the past 20 years have been the NIEs. Taking per-capita GDP of the United States as a reference, the level of income of the NIEs economies in 1970 was about one-tenth that of the United States. Since then, however, the per-capita GDP of the NIEs economies have grown steadily. As of 1993, they have reached just under six-tenths that of the United States. The per-capita GDP of the ASEAN economies have also been climbing since the 1970s, but by more moderate rates. Standing at 6 percent of the U.S. in 1970, they remained at 7 percent even by 1993. APEC Latin America, which saw its economies stagnate in the 1980s, has had income levels remain at about one-tenth those of the U.S.

The above comparison, however, was made by converting figures using actual foreign exchange rates. In general, the level of the per-capita GDP in APEC developing economies in 1993, as calculated on the basis of purchasing power parity (PPP), was higher than the level calculated by actual exchange rates. The level of income of the ASEAN economies on

a PPP basis reached 20 percent that of the United States, while the level of the PRC came close to 10 percent. On the other hand, the relative level of per-capita GDP of Japan relative to the U.S. on a PPP basis fell, reflecting the real appreciation of the yen that has taken place.

Growth and Increasing Sophistication of Consumption

The rise in incomes in the economies in the APEC region has been accompanied by a high growth in consumption (Table 2-3-6). Moreover, changes have been seen in the composition of that consumption. To examine the changes in the composition of consumption in the economies in the region, four APEC developing economies for which data were readily available (the ROK, Thailand, the PRC, and the Republic of the Philippines) were chosen. It was then analyzed to see how the share of discretionary consumption expenditures like education, entertainment, outside dining, and services (final consumption in the household sector minus the costs of food, rent, utilities, and other basic items) had changed along with the rise in per-capita GDP (Chart 2-3-7). According to this analysis, the share of discretionary consumption expenditures rose in all the economies except the Republic of the Philippines. In particular, the composition of consumption in the ROK and Thailand has become rapidly more sophisticated since 1980 and by 1993, the share of discretionary consumption expenditures had risen to about the same levels in these economies as the industrialized economies. On the other hand, in the PRC and the Republic of the Philippines, the share of discretionary consumption expenditures remain at a comparatively low level.

Expansion of Tertiary Industries (Services Sector)

Rising income levels and increases in discretionary consumption expenditures are inducing changes in the industrial structures of the economies in the region.

A comparison of the shares of the tertiary industries (services sector), obtained from value added by industry, at three points in time 1975, 1985, and 1993 reveals a rise in the share over the period (Table 2-3-8). In particular, in most of the East Asian developing economies, especially in the NIEs, the share of tertiary industries has been climbing. This is also apparent in the PRC. In contrast, in APEC Latin America, due in part to the fact that it was already high in the 1970s, the share has recently essentially remained level.

The expansion in domestic markets and structural changes in consumption noted above have given rise to new business opportunities and new sources of domestic demand, providing an additional engine for economic growth in the region.

3. Changing Motivation of Foreign Direct Investment

Reflecting the rise in income levels and accompanying expansion and structural changes in the domestic markets of the APEC developing economies, the cost-pursuing, export-base type of foreign direct investment in the manufacturing industries which has characterized investment in the developing economies up to now is now being supplemented by foreign direct investment in the domestic-demand-oriented manufacturing industries and non-manufacturing industries aimed at securing shares of the domestic markets.

For example, recent surveys show that the most important markets for the products of Japanese transplants in Asia have become those of the host economies and nearby areas (Chart 2-3-9). This trend is expected to become even more apparent in the future. For example, while securing cheap labor was cited more frequently by companies as a reason for investing in the PRC as compared with the NIEs and ASEAN, the most frequently cited reason was the desire to enter the Chinese market. This reflects the size of the potential market in the PRC.

Thus, the developing economies in the region are now being assessed favorably as consumer markets, in addition to their previous high evaluation as bases for production.

Section 4. Pattern of Economic Development and Deepening Economic Interdependence

In this chapter, so far we have looked at the deepening economic interdependence in the APEC region. In this section, we describe the pattern of economic development in the region, along with its relationship with the deepening interdependence in the region.

The "Flying Geese Formation" Pattern of Economic Development

The economic development in the APEC region has, since the 1970s, followed a pattern wherein new industrial sectors are successively passed on to economies lower in their stage of development. This wave-like international propagation of industrial sectors has been called variously the "flying geese formation" pattern of development, the "multilayer" development, or the "catching-up product cycle" development. Through this process, in which economies lower in the development stage pursue and successively catch up with more advanced economies, their own comparative advantage changes from labor-intensive goods to capital-intensive or technology-intensive goods, and they build more sophisticated industrial structures.

The original "flying geese formation" theory envisaged the process as follows: (1) new products are imported from the more advanced economies and consumed domestically; (2) new technology is introduced from abroad and domestic production launched to deal with the increased domestic demand; (3) domestic production technology is improved and imported products are replaced by domestic production; (4) domestic demand finally slows, but exports are initiated and production itself increases; (5) the products lose out in the competition with later-starting economies on the international markets, exports decline, and further expansion of production is restrained; and (6) the products of the later-starting economies with the stronger competitiveness in price and quality start to be imported, and domestic production declines. This kind of a process was assumed to take place successively in new industries, thereby creating a dynamic economic development. The assumption was, however, that domestic companies would produce products essentially for the domestic market.

As opposed to this, in the modern context, the process is thought to be as follows: (1) companies producing new products are set up by foreign direct investment; (2) domestic production is started and the products are exported; (3) the transfer of technology is promoted through foreign direct investment, and capital and intermediate goods which had been

imported are replaced by domestic production; and (4) wages and labor costs rise and export competitiveness deteriorates, which in turn causes exports to decline and production to be curtailed. In contrast to the earlier version of this theory, the basic dynamism is provided by the activities of foreign companies targeting the export markets.

Two points made earlier in this report should be recalled. First, the whole process was made possible by the implementation of sound macroeconomic policy and market-oriented structural policy. Second, export expansion and economic growth facilitated foreign direct investment, thereby making the process a mutually reinforcing one.

This process of development can be identified clearly in East Asia. For example, the coefficients of specialization by type of goods for Japan, the NIEs, ASEAN, and the PRC are shown in Chart 2-4-1. It shows that the coefficient rises initially, then starts to fall, before becoming negative. For each category of goods, this pattern shows up for economies in the order of their stages of development: from Japan, to the NIEs, to ASEAN, and on to the PRC. For each economy, the pattern shows up in different goods in the order of non-durable consumer goods, durable consumer goods, and capital goods. The "flying geese formation" can clearly be observed here. A similar process was also seen in earlier decades as labor-intensive production in textiles, consumer electronics, and other fields shifted from North America to Asia.

What should be simultaneously noticed in Chart 2-4-1, however, is that the speed by which the ASEAN economies and the PRC, in particular, are pursuing their predecessors has been greatly increased. Behind the shortening of this pursuit process has been the recent surge in export-oriented foreign direct investment, often reflecting the transfer of whole production plants to enable exports which are competitive in the international markets.

While historically, some industries developed out of import-substitution and some were fostered by foreign direct investment that aimed to secure a share in the domestic market of the host economy, it cannot be denied, however, that the current dynamism of economic development is provided by the export-oriented foreign direct investment.

It should be noted that, although the "flying geese formation" pattern of development involves some economies giving up some types of production, it does not mean that these more advanced "geese" lose dynamism. Indeed, the contrary is the case. The most prominent examples of this may be found in the NIEs, which are reducing their coefficients of export specialization in durable and nondurable consumer goods and raising their coefficients of export specialization in capital goods. During the process, however, they have maintained both high economic growth and excellent employment. This suggests that passing on more labor-intensive sectors to other economies does not necessarily bring adverse effects on growth or employment with it.

Pattern of Market Development and Economic Interdependence

The driving forces behind the deepening of economic interdependence have been a growth in trade and investment, fostered by trade liberalization and reflecting the ability of increasingly competitive developing economies to access open export markets, and a hospitable climate for foreign and domestic investment. A characteristic pattern of economic development in the region has been "flying geese formation" where production of labor-intensive goods has migrated progressively to emerging economies in the region, thereby promoting economic interdependence. In this sense, the deepening of economic interdependence is the offspring of economic development in the region.

The relationship between economic development and economic interdependence, however, is not a one-way relationship. As we will see in the next chapter, there is also a reverse influence from economic interdependence to economic growth and development.

CHAPTER 3. MEDIUM-TERM OUTLOOK AND CHALLENGES FOR SUSTAINED ECONOMIC GROWTH

-----Overview -----

Chapter 3 discusses the economic outlook and the challenges to be met to sustain economic growth from a medium-term point of view.

Section 1 reviews the medium-term economic outlook of individual economies, and projects a continuation of strong growth over the medium-term. For the region as a whole, real growth is projected to average around 3 1/2 percent during the five years to the year 2000.

Section 2 examines the extent to which supply-side factors support this projected growth performance and confirms that the region has sufficient growth potential in the medium-term. However, growth potential does not, by itself, guarantee actual growth. To fully realize growth potential, the chapter argues that it is necessary to have (a) an incentive structure that guides economic activities in that direction; and (b) an appropriate policy setting that facilitates growth.

With regard to the former, it is emphasized that, in the context of the APEC region, the most important incentive is provided by the competitive pressures from the deepening of economic interdependence. In this sense, deepening of economic interdependence promotes economic growth. Taken together with the findings of the previous chapter, this implies that there is a mutually reinforcing relationship between economic growth and economic interdependence. Such a relationship is behind the dynamism of economic growth in the region.

Finally, Section 3 identifies some initiatives that need to be taken to achieve sustained economic growth.

In Chapter 1, we evaluated the macroeconomic trends in the APEC region from the perspective of short-term business cycles. In Chapter 2, we analyzed the economic interdependence of the region from the standpoint of economic structure. In this chapter, we

will examine the medium-term outlook and the challenges the region faces in sustaining economic growth.

Section 1. Medium-term Macroeconomic Outlook

The economy of the APEC region in recent years has, overall, demonstrated strong performance. As seen in Chapter 1, the economy of the region appears to be poised for sustained high growth without aggravating inflation. Realization of such sustained growth is important not only for the region, but also for the non-APEC region, as is suggested by the term "global center of growth" which is often used to describe the region. We examine the medium-term macroeconomic outlook for the APEC region below.

Nature of Growth Projections

Table 3-1-1 provides a summary of the medium-term outlook for the region drawing on a range of official and quasi-official projections. The various outlooks differ in nature, time of announcement, periods covered, and scope covered. In order to understand the nature of these projections, concepts of growth rates need to be clarified. In the medium-term context, three types of growth rates can be conceived (Chart 3-1-2).

First, there are actual growth rates which reflects economic fluctuations, including effects of business cycles from year to year (referred to below as "cycles"). Second, there are trend growth rates which capture average performance over the period (hence "trends"). Third, there are growth rates of target performance which are assumed in economic planning in some economies (hence "targets").

The medium-term growth projections can be classified according to these three conceptual types of growth rates. First, there are projections which try to forecast "cycles", though such projections are rare. Second, there are projections which try to forecast "trends". These projections may or may not represent full-employment, potential growth paths For example, in developing economies where labor force growth is high but investment is constrained, the projected "trend" growth path may not be sufficient to achieve full employment. In such a case, a growth path that would sustain full employment would

be considered a "target," and the projected "trend" growth path would be expected to progressively close the gap between the actual situation and the "target". Accordingly, the projected "trend" growth rates would be higher than the growth rate of the "target" by the amount necessary to narrow the gap. On the other hand, in industrialized economies, the growth of the labor force is quite low, and labor markets are relatively flexible; thus, "trends" in general can be conceived as full-employment growth paths.

Outlook for Medium-term Growth

Figures for the individual economies show that the industrialized economies which had low growth in the early 1990s expect to see a strengthening in their average rates of growth in the medium-term. On the other hand, the developing economies which have exhibited fairly high growth expect to maintain these relatively high growth rates. Inflation is, in general, expected to be held in check. Overall, these medium-term economic outlooks project a general continuation of strong growth performance into the future.

Assuming these figures, what kind of scenarios are possible for the economy of the APEC region in the future? Chart 3-1-3 gives us a rough idea. To provide a point of reference, the standard case (1) assumes that the growth rate of the first half of 1990s will continue unchanged in the second half of the decade. The composite official projection case (2) is a compilation of the official (or quasi-official) projections of the individual economies, supplemented by simple projections for economies where no such projection are available. It should be emphasized that official (or quasi-official) projections of the individual economies may differ in definition, projection period, etc. and are thus not strictly comparable. The composite outlook based on these projections, therefore, should be considered with caution. Finally, the private-sector projection case (3) shows the projection of Wharton Econometric Forecasting Associates (WEFA) as a representative projection, which has the advantage of internal consistency

The average projected growth rate for the second half of 1995 given in the standard case (1) is 2.7 percent; in the composite official projection case (2) it is 3.4 percent; and in the private projection case (3) it is 3.6 percent. It is interesting to see that these projections are broadly consistent, particularly when account is taken of the downward bias in the standard case (1) due to the fact that it reflects the cyclical downturn in the early 1990s in the industrialized economies. The projections suggest that average real growth rate of around 3

1/2 percent is feasible over the five years to the year 2000. In this scenario, the economy of the APEC region as a whole is projected to grow by a cumulative 20 percent over the period.

A breakdown of the composite official projection case shows that the real growth rate in the industrialized economies is expected to rise from 2.1 percent in the early 1990s to 2.9 percent in the late 1990s. The developing economies, while seeing some drop in real growth rate (from 6.9 percent in the early 1990s to 6.2 percent in the late 1990s), are expected to enjoy continued high growth.

Section 2. Growth Potential and Economic Interdependence

Growth Potential as seen from Supply Side

Would this kind of medium-term outlook for the APEC region be justified by the growth potential as seen from the supply-side? In particular, how feasible is the high growth of the East Asian developing economies in the medium-term?

This question can be approached by analyzing two different issues; 1) the issue of how the past record should be assessed, and (2) the issue of how future potential could be projected.

First, regarding the issue of the assessment of the past, estimates by the World Bank indicate that, until now, two-thirds of the growth in the East Asian developing economies is due to the contribution of the increase of factor inputs; the remaining one-third is attributed to the rise in total factor productivity or TFP (i.e. growth in efficiency of production which is usually estimated as the increase in output that is not accounted for by increases in factor inputs). In other words, the conclusion of the study was that the contribution of the rise in TFP was by no means small. Other studies suggest less TFP growth. The differences in the findings are due in part to conceptual matters. For example, in some studies the contribution of factor inputs includes the qualitative improvement of input, whereas in other studies qualitative improvements of factors accounts for part of the rise in TFP.

It is interesting that some economies at the early stage of industrialization evidence little if any (indeed sometimes negative) contribution from TFP growth. This may reflect the fact that such economies have been proceeded with investment in infrastructure in advance of the actual meeting of capacity constraints. This would have accounted for the TFP growth being low because the productive effects of additional investment in infrastructure would not yet have been sufficiently manifested.

Regarding expectations of future potential growth, the following observations can be made. First, the rate of increase of factor inputs can be expected to be maintained in the medium-term. High domestic savings have been a major contribution to the growth achieved in the region. It has also risen at a rate commensurate with the rise in the rate of investment (Chart 3-2-1). Moreover, the progress in liberalizing investment regimes has facilitated imports of foreign savings to supplement domestically generated capital. In the case of the

East Asian developing economies, most of this is in the form of foreign direct investment which is relatively stable in the sense of not being subject to sudden reverse outflows. Turning to the labor force, in many developing economies, while population growth rates are nosing down slightly, the labor force population is growing at a fast rate, and there remain massive reserves of potential labor in the agricultural and household sectors (Table 3-2-2). It is true that some economies, the NIEs in particular, are facing labor shortages. However, the dynamic features of their economies have enabled them to continue high growth by enhancing labor-saving investment and increasing sophistication of their industrial structures. In this sense, labor shortages have opened up a new field of growth for these economies.

Second, factor inputs do not merely contribute to growth through its quantitative increase, but also contributes through its qualitative improvements. In the area of investment, the contribution has been largely due to the introduction of facilities embodying the latest technology. For developing economies, the main source of such new technology is from foreign direct investment. As these economies catch up to the industrialized economies this source of growth will be exhausted. But as there is still a huge gap in the overall levels of technology, this is not likely in the medium term. In the area of labor, improvement in the quality of labor has also contributed tremendously to the growth of the region and the assessment has been that the East Asian developing economies still have considerable room for improvement in school education and vocational training (Table 3-2-3).

Third, while the extent of the rise in total factor productivity differs depending on the economy concerned, it is by no means low. A rise in total factor productivity involves technological innovation, catching up to the best practice technology, and improvement in efficiency. There is considerable room for further gains in each of these areas. For example, transfers of managerial expertise through foreign direct investment, diffusion of best practices and the increased ability of educated labor to exploit the scope for efficiency gains can be expected to help sustain TFP growth.

Furthermore, the relatively low level of investment in research and development (R & D) compared to the industrialized economies (Chart 3-2-4) suggests room for technological development both in the sense of improving capital quality and also in the

sense of increasing TFP by improving the efficiency of combining factor inputs.

Considered over the long term, it is to be expected that (1) economic development will lead to a fall in the rate of population growth of developing economies which will lead to aging of society, reining in the growth of the labor force; (2) increased aging of society will also eventually lead to lower domestic savings rates; (3) the scope for increasing the rate of school attendance will be exhausted and improvements to the quality of the labor force will level off; and (4) the rise in total factor productivity will slow down as the developing economies attain advanced technology. When viewed in the medium term, however, there is enough potential to sustain the strong growth performance of the region.

It should be remembered, however, that growth potential does not, by itself, guarantee actual growth. For example, if infrastructure development lags, the pace of growth could be constrained by the emergence of bottlenecks. Moreover, to make the most of an economy's growth potential, it is essential to have an incentive structure that promotes the efficient allocation of resources.

Deepening of Interdependence and Sustained Economic Growth

In the modern economy, where market principles lie at the center of the system, the fundamental incentive is provided by competition. In the context of the APEC region, the most important contribution to increased competition comes from the deepening of interdependence, led by trade and investment. In this sense, implementation of the "Bogor Declaration" and the realization of free and open trade and investment in the APEC region is of vital importance to the sustained economic growth of the region.

On the one hand, the deepening of interdependence strengthens growth by: providing a strong incentive to mobilize inputs and to improve their quality; by expanding potential markets; by allowing the attainment of economies of scale, enabling goods to be made at lower cost; by providing an incentive to increase the efficiency of management through increased pressure of competition; and finally by providing an incentive to enhance technological innovation, an essential factor for long-term sustained growth. In particular, it (1) promotes technology transfer through trade and foreign direct investment; and (2) promotes R & D investment through competitive pressures. At the same time, since the deepening of interdependence takes place in a global context, it promotes global efficiency in R & D through an international division of labor in R & D activities according to comparative advantage.

Conversely, the growth in trade and investment, which both underpinned the dynamic growth in the region, and gave rise to the characteristic pattern of economic development in the region, promotes economic interdependence.

Thus, behind the dynamic economic growth of the APEC region, there is a mutually reinforcing relationship between economic growth and economic interdependence.

Section 3. Medium-term Challenges for Sustained Economic Growth

The realization of steady economic growth in the region over the medium-term, as was discussed in the previous sections, requires that various challenges be appropriately addressed.

First, there is the challenge of seizing the new opportunities for growth by broadening markets and introducing competition. Second, there is the challenge of securing growth potential by mobilizing and improving factor inputs as well as promoting technological innovation. Third, there is the challenge of establishing foundations for future growth, including by developing the infrastructure to support further growth and by eliminating in advance factors which might potentially constrain future growth. Lastly, there is the challenge of providing a stable environment in which firms and consumers can pursue their economic activities.

1. Initiatives to Seize Growth Opportunities

In today's dynamically changing world economy, the new source of growth is presented by increasing opportunities for trade and investment and by expanding domestic markets. In order to realize these growth opportunities, it is necessary to proceed with the liberalization and facilitation of trade and investment and to work toward establishing domestic markets. Further, to make sure that these factors contribute to growth, it is essential that market forces be allowed to come into full play.

Liberalization and Facilitation of Trade and Investment

The APEC region has probably benefited the most in the global economy from the free movement of goods, services, and capital. The extent to which this has contributed to the growth and development of the region was examined in Chapter 2. The successful conclusion of the Uruguay Round negotiations and the establishment of the WTO can be expected to provide even greater opportunities for growth in the APEC region.

With this in mind, APEC is now taking new initiatives for realizing an even freer

flow of goods, services, and capital. The APEC Ministerial Meeting to be held in Osaka in November, 1995, will take the first steps toward the realization of the goal enunciated in the "Bogor Declaration" of achieving free and open trade and investment by the years 2010/2020. At the Osaka Meeting, member economies will formulate the "Action Agenda", to achieve that goal.

APEC member economies can further improve the welfare of the people in the region and contribute to the global economy as a whole by faithfully and steadily implementing the "Action Agenda."

Establishment of Domestic Markets

New domestic markets are emerging in the APEC region. In the APEC developing economies, the economic development which has taken place up to now is giving rise to massive new purchasing power and new consumption demand. This provides the developing economies which have previously relied mainly on foreign demand for their growth with new growth opportunities through domestic demand. Meanwhile in the industrialized economies, rapid advances in technology have been accompanied by emerging new consumer needs.

To seize these new growth opportunities, it is necessary to allow domestic markets to develop to efficiently link supply and demand, to establish prices in a competitive environment, and to allow effective market access for both domestic and international suppliers.

Emphasis on Market Functions

Whether the starting point is foreign or domestic demand, it is necessary to promote efficient utilization of limited resources and provide incentives for technological innovation, thereby helping realize sustainable economic growth. Emphasizing the role of markets lays the foundation for spreading the benefits of growth equally throughout the economy, not just in parts of it. Moreover, considered dynamically, where there is a constant need for further sophistication in the industrial structure so as to adjust to evolving comparative advantage, efficient markets promote rapid movement of factors of production and smooth adjustments in the industrial structure. The most important things from this perspective are (1) to create the conditions for competition and (2) readapt regulatory frameworks to the changing environment.

2. Initiatives to Secure Growth Potential

To realize growth opportunities, it is necessary to mobilize latent capital and labor the basic inputs for growth as well as to improve the quality of each. Furthermore, it is necessary to boost total factor productivity.

Reforms of Financial System

To increase capital input, it is necessary to mobilize domestic savings, to facilitate access to foreign savings, and to make efficient use of the funds raised. When financial systems are subject to excessive regulation, it is difficult for them to carry out these functions effectively. Accordingly, to allow them to perform their essential role efficiently, it is important that such financial systems be liberalized, in a context of appropriate prudential regulation.

Development of Human Resources

In most economies in the APEC region, the high quality of human resources is regarded as having made a major contribution to their growth. In order to sustain high growth, and to promote smooth restructuring of industries, it is important to make use of this advantage. Accordingly, consistent with the "Declaration on the Human Resource Development Framework," it is important to (1) raise the rate of attendance at primary and secondary schools and improve their quality, (2) establish more developed vocational-training programs, and (3) provide more comprehensive training programs for management. Moreover, by avoiding further enlargement of income differentials whereby the benefits of growth flow to only a small segment of the population, the basis for strengthened domestic demand will be laid. By avoiding limitations to growth from inadequate human resources, in particular, by facilitating access to education and job opportunities for women, economies will not only realize their potential growth but also facilitate the adjustment of an increasingly sophisticated industrial structure to changing consumer needs.

Promotion of Technology Transfers and Development

The surge in foreign direct investment which has taken place since the late 1980s is a major source of the region's growth, and has become a major medium for the transfer of technology. This in turn has led to great improvements in the level of technology of the developing economies. Building the technical foundation for sustained growth requires that such transfers of technology be encouraged in the future. At the same time, it is important that the introduced technology be used as a springboard for independent development of technology in the economies concerned, in accordance with their own special conditions.

Therefore, it is crucial to (1) promote the introduction of technology through the promotion of trade and foreign direct investment; to (2) encourage higher education and work to train capable researchers; and to (3) prepare an environment in which investment in R & D is motivated. Since improvement in the level of technology is closely linked with capital investment and human resources, it is important to proceed in an overall, balanced manner in order to exploit potential synergies.

3. Initiatives to Establish Foundations for Future Growth

The following are also important for sustaining growth in the medium term, as the work of other APEC fora demonstrates.

Broadening and Deepening of Infrastructure

There are economies in the region in which the electric power system, transportation network, communications facilities, and other economic infrastructure remain insufficient and which may find difficulty in keeping pace with the additional requirements posited by medium-term growth. It is important to establish the necessary economic infrastructure so as to preserve the dynamism of economic development in the future and to correct regional imbalances. There are also many economies in which social infrastructure including the educational, health care, and sewage and water supply systems are insufficient. These must also be built up, as they can become factors limiting economic growth in the longer term.

It is difficult to raise sufficient funds in the domestic market alone when trying to establish economic and social infrastructures. Cooperation by the industrialized economies in the APEC region to assist the self-help efforts of the developing economies in building their infrastructures will not only foster economic growth and development but will also contribute to developing regional ties.

Because one of the driving forces behind dynamic economic development is the vitality of the private sector, it is also important to ensure sufficient freedom of business activity. At the same time, it is important to lay down clear rules for economic activity and by enforcing them, to instill legal credibility. Toward this end, in economies where the legal framework and institutions for economic activities are not fully developed, governments should proceed further with efforts to set them up, and to endeavor to enforce those legal systems appropriately.

Promotion of Small- and Medium-sized Businesses

Small- and medium-sized enterprises can significantly contribute to international competitiveness, to increased investment, to greater employment and to improved income distribution. In particular, for sustained economic development through improved international competitiveness, it is important to encourage the establishment of supporting industries for assembly and processing type industries such as general and electrical machinery. By and large these new firms would be small- and medium-sized enterprises, hence the importance of an environment conducive to their development.

Economic Growth, the Environment, and Energy

APEC accounts for about 50 percent of the energy demand of the world as a whole. Moreover, demand in the developing economies of APEC is growing faster than the world average. This trend is expected to continue in the future and might cause bottlenecks in economic growth and destabilize the international supply and demand of energy. In addition, the rapid rise of energy demand results in a sharp increase in the emission of SOx, NOx, and CO_2 , due in part to the heavy reliance on coal. There is a very real concern over the adverse effects on the environment in the APEC region, such as acid rain and global warming.

To alleviate such constraints on growth to the maximum extent possible, improvement of the structure of supply and demand of energy is essential. There is a need to improve energy efficiency, and to facilitate the expanded utilization of natural gas so as to promote the supply of environment-friendly energy. Through this, it is necessary to seek ways of simultaneously achieving economic growth, stable energy supply and demand, and environmental protection in the APEC region.

4. Initiatives to Secure Stability of Macroeconomic Environment

With interdependence growing deeper through links such as trade and capital transactions, it is important that a stable macroeconomic environment be secured. This contributes to growth by reducing uncertainties and minimizing the risks for economic activities, by enabling stable foreign exchange rates and by encouraging trade and capital transactions. A stable environment is also desirable in terms of implementing structural policies.

Accordingly, it is necessary to carry out macroeconomic policies from a medium-term perspective. Such macroeconomic policy management will also contribute by enhancing policy credibility.