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December 20, 1984

To: Members of the Executive Board  
From: The Secretary  
Subject: Singapore - Staff Report for the 1984 Article IV Consultation

Attached for consideration by the Executive Directors is the staff report for the 1984 Article IV consultation with Singapore, which has been tentatively scheduled for discussion on Monday, January 21, 1985.

If Executive Directors have technical or factual questions relating to this paper prior to the Board discussion, they should contact Mr. Szapary (ext. 7365).

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INTERNATIONAL MONETARY FUND

SINGAPORE

Staff Report for the 1984 Article IV Consultation

Prepared by the Staff Representatives for the  
1984 Consultation with Singapore

Approved by Tun Thin and Eduard Brau

December 19, 1984

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The 1984 Article IV consultation discussions were held in Singapore during October 29-November 8, 1984. The Singapore delegation was led by Dr. Teh Kok Peng, Manager of the Economics Department of the Monetary Authority of Singapore (MAS). Discussions were also held with Mr. Ngiam Tong Dow, Permanent Secretary of the Ministry of Trade and Industry; Mr. J.Y.M. Pillay, Permanent Secretary of Finance (Revenue); and Dr. Richard T.T. Hu, Managing Director of the MAS. The staff team consisted of Messrs. G. Szapary (Head), H.C. Kim, X. Vongsathorn, C. Sassanpour, and Mrs. J. Ranasinghe (Secretary), all from ASD. Mr. Jaafar Ahmad, Alternate Executive Director, attended the meetings as an observer.

Singapore has accepted the obligations of Article VIII, Sections 2, 3, and 4.

## I. Overview and Recent Developments

### 1. Overview

The economic successes of Singapore are well known: high rates of economic growth; low rates of inflation; strong balance of payments position; high and rising levels of foreign exchange reserves; and small external public debt and negligible debt service ratio. To a large extent, these remarkable achievements are attributable to government policies. Recognizing the constraints imposed by the small size of the economy and its lack of natural resources, and capitalizing on the country's favorable geographic location, the authorities adopted early on an outward-looking and export-oriented strategy, maintaining a liberal economic system and placing emphasis on price stability, a strong currency, and continuous efforts to upgrade the economy.

The cornerstone of prudent financial management has been budgetary discipline. Government revenue as a ratio of GDP has increased steadily over the years, enabling the authorities to implement an ambitious public housing and infrastructure program. Even though government expenditure to GDP has also risen, the overall budget has recorded a surplus every year since 1968 (Chart 1). These surpluses have been substantially augmented by savings generated by the Central Provident Fund (CPF) <sup>1/</sup> and the Post Office Savings Bank (POSB), which have been deposited in government accounts with the Monetary Authority of Singapore. As a result, the Government's financial operations have exerted a sizable contractionary impact on domestic liquidity, creating a chronic excess demand for liquidity which has been met by capital inflows.

Domestic savings have been on a continuous upward trend, reaching slightly over 40 percent of GDP on average during 1982-83. A growing proportion of the domestic savings has been in the form of contributions

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<sup>1/</sup> The CPF is Singapore's social security fund.

to the CPF which averaged about 27 percent of total domestic savings in 1982-83 (Chart 2) 1/. Although the level of domestic savings has been high and rising, an important, though declining, part of gross domestic investment has been financed by foreign capital. The inflow of capital mostly took the form of self-financing direct foreign investment; over the past decade, more than 80 percent of the capital inflow was in this form. In addition to expanding the domestic resource base, foreign direct investment has also served as a vehicle for the transfer of skill and technology. Despite the steady influx of foreign investment, the latter's share in total equity investment remained relatively stable at 36-40 percent during 1970-81.

Another salient feature of Singapore's economic success has been its ability to restructure the economy. The steady upgrading of the economy from entrepot activity to labor-intensive exports, to high-technology and high-skill exports, and finally, to an economy increasingly oriented toward internationally tradable services--such as trading, financial, and engineering services--has enabled Singapore to adapt continuously to the changing international comparative advantages. The authorities have pursued the policy of upgrading with foresight and determination, by providing incentives for training, automation, and investments that promote improved skills and technology; by initiating a three-year high wage policy in 1979 to phase out labor-inefficient industries and promote skill- and technology-intensive production; 2/ and by building up a modern infrastructure, including an efficient telecommunications system.

This confluence of forces--strategic location, prudent financial management, high domestic savings, investor confidence, continuous upgrading of the economy--should maintain Singapore's favorable growth potential in the years ahead. However, as a small open economy, Singapore remains highly vulnerable to external developments.

## 2. Recent developments

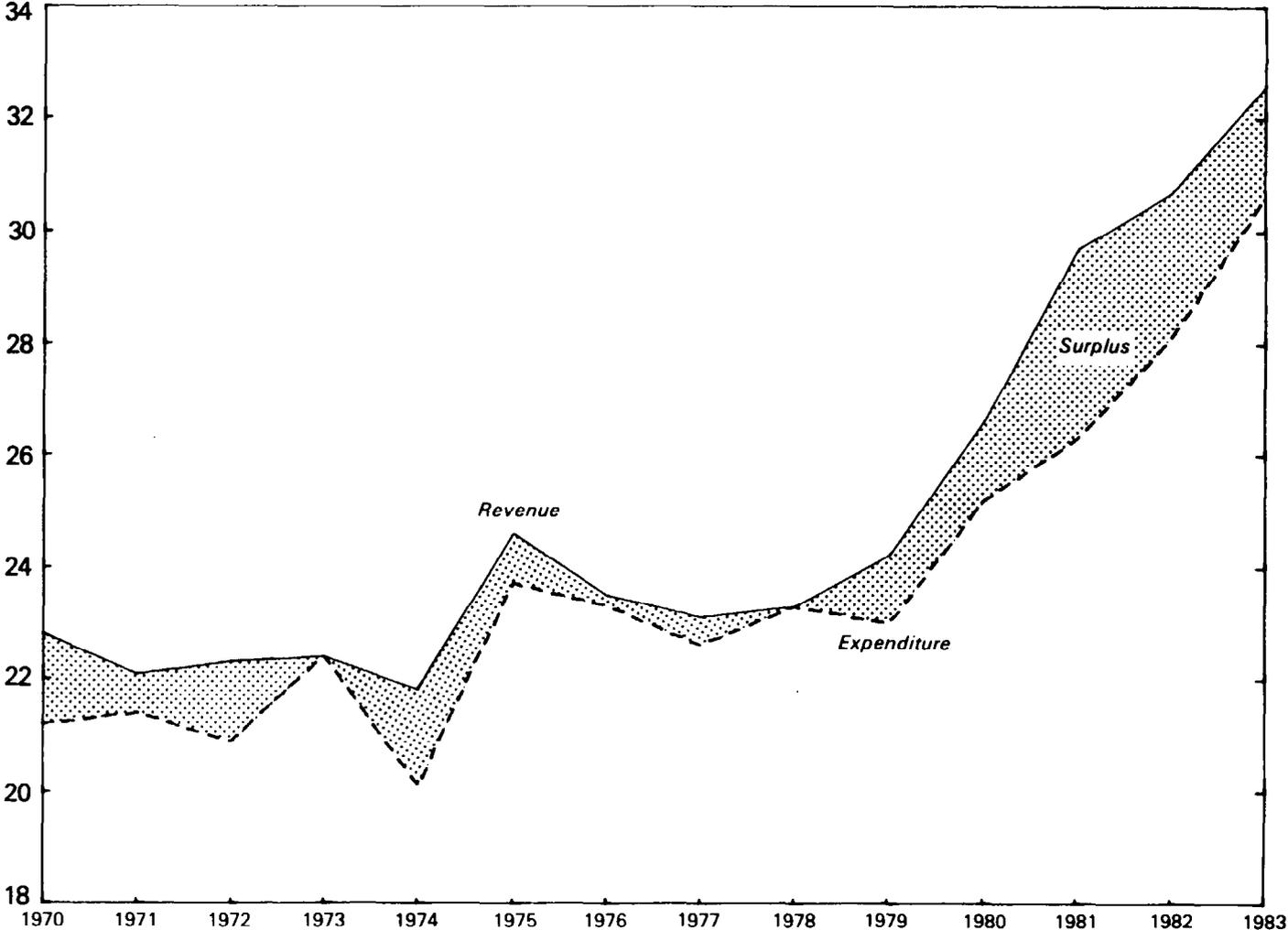
After a period of slowdown in 1982, reflecting the impact of the global recession, the Singapore economy made a quick turnaround in the second quarter of 1983, aided primarily by the economic recovery in the United States. Real GDP increased by 7.9 percent in 1983, compared with

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1/ The rate of contribution to the CPF has been raised gradually over the years. The most recent increase was in July 1984, bringing the rate of contribution to 50 percent of the employees' wages (46 percent previously), to be paid in equal shares by the employee and employer.

2/ Under the wage correction policy, a National Wages Council (NWC), consisting of representatives of the Government, employers, and unions, recommended substantial wage increases during the three-year period beginning in July 1979.

CHART 1  
SINGAPORE  
BUDGETARY AGGREGATES, 1970/71-1983/84  
(In percent of GDP)

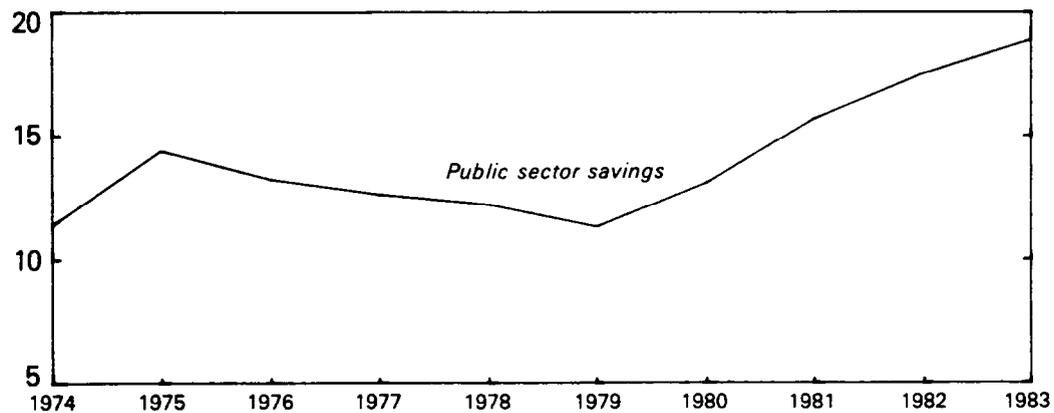
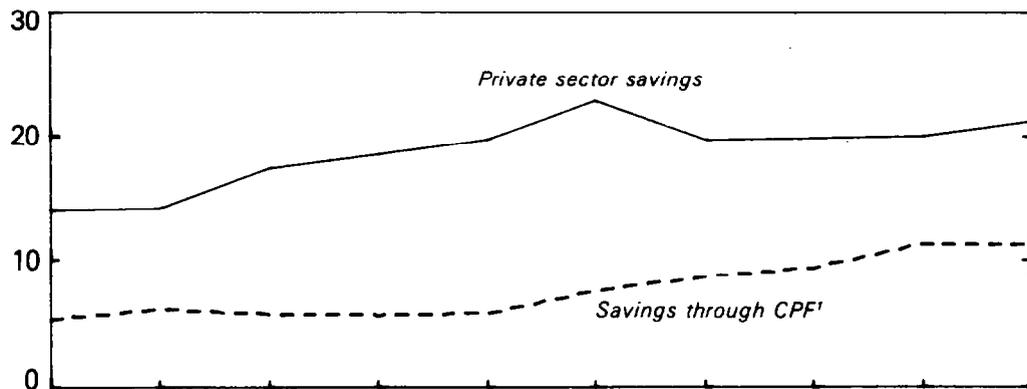
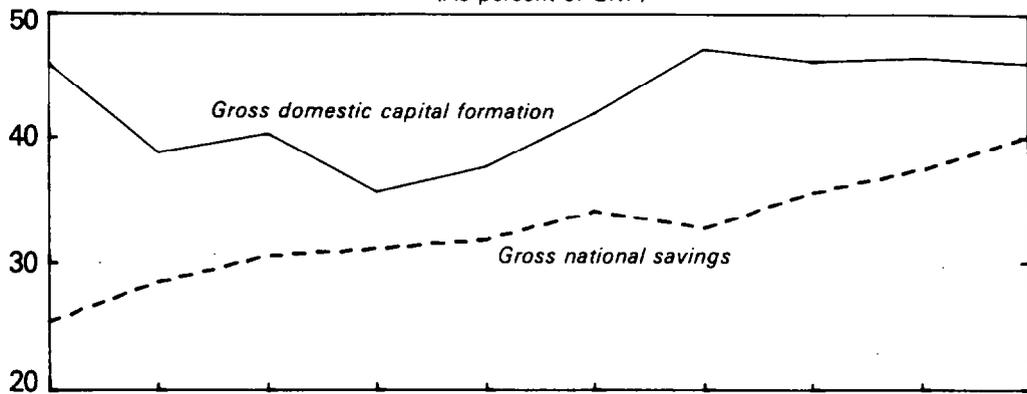


Source: Data provided by the Singapore authorities



CHART 2  
SINGAPORE  
GROSS DOMESTIC CAPITAL FORMATION AND  
GROSS NATIONAL SAVINGS, 1974-83

(As percent of GNP)



Sources: *Yearbook of Statistics*, Singapore, 1983/84, Department of Statistics, Singapore; data provided by the Singapore authorities; and staff estimates.

<sup>1</sup>Savings through CPF are part of private sector savings.



6.3 percent the year before (Table 1). In 1982, domestic demand--partly stimulated by government construction activity--had been the major source of economic expansion. In 1983, by contrast, external demand provided the major stimulus to growth, led by exports of high-technology products--such as electronic goods and computer peripherals--mostly destined to the United States; exports of chemicals, mainly to the region, also grew strongly. Construction activity slowed, although it remained a major contributor to growth. On the other hand, the level of investment in machinery and equipment fell, reflecting the low capacity utilization (75 percent) in manufacturing as the completion of investments undertaken in earlier years coincided with the world recession. With external demand for both goods and services remaining strong, real GDP rose at an annual rate of about 9 percent during the first nine months of 1984. On the domestic side, private construction slowed considerably further--reflecting an oversupply in both residential housing and office space--which was only partly offset by continued brisk government construction activity; investment in manufacturing also remained sluggish.

These high rates of growth have been sustained without any significant domestic price pressures. As a result of a decline in foreign prices and the continued strength of the Singapore dollar, the WPI, which is composed almost entirely of traded goods, declined by an annual average of 2 percent in 1983 and the first nine months of 1984. <sup>1/</sup> The CPI, which also includes nontraded goods, rose by an annual average of only 2 percent during the same period, reflecting mainly adjustments in taxes and charges.

Following the end of the wage correction policy, the Government withdrew in 1983 from playing an active role in determining wage guidelines. Instead, acting on the belief that wages should henceforth be determined by market forces, the authorities undertook to promote union-employer wage bargaining at the individual company level. As a result, the increase in wages moderated significantly during the past two years. Despite the pickup in economic activity, the rate of growth of employment slowed in 1983, as a consequence of automation and previous labor hoarding in anticipation of an upturn in the economy. Nevertheless, the labor market remained tight, with the rate of unemployment

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<sup>1/</sup> Because of the importance of foreign trade in the economy and the virtual absence of trade restrictions, movements in domestic prices in Singapore closely follow those in foreign prices. For an analysis of the factors determining price movements in Singapore, see Annex I in the associated Recent Economic Developments report to be issued shortly.

Table 1. Singapore: Selected Economic and Financial Indicators, 1980-85

|  | 1980   | 1981   | 1982   | 1983  | 1984 <u>1/</u> | 1985 <u>1/</u> |
|--|--------|--------|--------|-------|----------------|----------------|
| (Annual percent changes, unless otherwise specified)               |        |        |        |       |                |                |
| National income and prices   |        |        |        |       |                |                |
| GDP at constant prices   | 10.3   | 9.9    | 6.3    | 7.9   | 8.5            | 6.0            |
| GDP deflator   | 7.6    | 7.5    | 4.7    | 2.0   | 1.5            | 2.0            |
| Consumer prices  | 8.5    | 8.2    | 3.9    | 1.2   | 3.0            | 1.0            |
| Gross fixed capital formation (real terms)                         | 20.1   | 15.8   | 23.3   | 7.7   | 7.7            | ...            |
| Manufacturing production   | 11.9   | 9.8    | -4.7   | 2.1   | 8.3            | ...            |
| Unemployment rate (in %)   | 3.1    | 2.9    | 2.6    | 3.2   | 2.6            | 2.5            |
| Wages (manufacturing)  | 12.2   | 16.7   | 10.4   | 11.0  | 10.0           | ...            |
| Unit labor costs (manufacturing)                                   | 10.5   | 11.4   | 15.7   | 5.0   | ...            | ...            |
| External sector  |        |        |        |       |                |                |
| Exports, f.o.b.  | 35.6   | 7.9    | -1.1   | 4.7   | 11.7           | 5.9            |
| Imports, f.o.b.  | 36.2   | 15.1   | 1.6    | -0.1  | 3.8            | 3.0            |
| Export volume <u>2/</u>  | 15.0   | 10.0   | 2.2    | 5.3   | 18.0           | 8.6            |
| Import volume <u>2/</u>  | 14.7   | 11.7   | 7.6    | 1.4   | 0.7            | 1.3            |
| Terms of trade <u>2/</u>   | 5.6    | 2.1    | 1.4    | -2.1  | -3.9           | -0.2           |
| Nominal effective exchange rate <u>3/</u>                          | 2.1    | 7.1    | 5.9    | 3.8   | 2.7            | ...            |
| Real effective exchange rate (CPI based) <u>3/</u>                 | -0.1   | 5.9    | 3.7    | 0.9   | 1.2            | ...            |
| Central Government <u>4/</u>                                       |        |        |        |       |                |                |
| Revenue  | 30.7   | 31.7   | 15.3   | 16.9  | 13.9           | ...            |
| Expenditure  | 30.6   | 23.3   | 18.9   | 19.9  | 18.5           | ...            |
| Money and credit <u>5/</u>   |        |        |        |       |                |                |
| Domestic credit  | 45.6   | 63.3   | 38.3   | 15.4  | 42.5           | ...            |
| Private sector   | 29.8   | 29.7   | 21.2   | 19.3  | 18.5           | ...            |
| Money and quasi-money  | 27.9   | 21.8   | 14.3   | 16.3  | 10.0           | ...            |
| Interest rate (end of period, 1-year fixed term deposit, in % pa.) | 10.6   | 9.0    | 7.1    | 6.8   | 7.6 <u>6/</u>  | ...            |
| (In percent of GDP)  |        |        |        |       |                |                |
| Central Government <u>4/</u>                                       |        |        |        |       |                |                |
| Revenue  | 26.6   | 29.7   | 30.7   | 32.6  | 33.6           | ...            |
| Expenditure  | 25.2   | 26.3   | 28.1   | 30.6  | 32.8           | ...            |
| Surplus  | 1.4    | 3.3    | 2.6    | 2.0   | 0.8            | ...            |
| Domestic financing   | -1.2   | -3.2   | -2.5   | -1.5  | ...            | ...            |
| External financing   | -0.2   | -0.1   | -0.1   | -0.5  | ...            | ...            |
| Gross fixed capital formation                                      | 39.4   | 41.8   | 46.3   | 47.3  | 47.6           | ...            |
| Gross national savings   | 31.5   | 33.2   | 36.4   | 39.4  | 39.9           | ...            |
| External current account   | -13.8  | -10.2  | -8.7   | -5.7  | -1.3           | -0.5           |
| External public debt   | 5.7    | 4.6    | 4.7    | 3.5   | 2.8            | 2.2            |
| External public debt service ratio <u>7/</u>                       | 0.4    | 0.3    | 0.3    | 0.6   | 0.3            | 0.1            |
| (In millions of U.S. dollars, unless otherwise specified)          |        |        |        |       |                |                |
| External current account   | -1,564 | -1,382 | -1,299 | -956  | -252           | -100           |
| Overall balance of payments  | 748    | 982    | 931    | 784   | 1,232          | ...            |
| Gross official reserves  | 6,567  | 7,549  | 8,480  | 9,264 | 10,496         | ...            |
| In months of total imports, f.o.b.                                 | 3.5    | 3.5    | 3.9    | 4.2   | 4.3            | ...            |
| In months of retained imports, f.o.b.                              | 4.5    | 4.3    | 4.8    | 5.4   | 6.0            | ...            |

Sources: Data provided by the Singapore authorities; and staff projections.

1/ Staff projections unless otherwise indicated.

2/ Excluding entrepot trade.

3/ Change in annual averages; for 1984, average change during first ten months of the year; an increase represents appreciation.

4/ Fiscal year beginning April 1; data for 1984 are staff estimates.

5/ Change in annual averages; for 1984, average change during first six months for credit and during first nine months for money and quasi-money.

6/ As of September 1984.

7/ As a percent of exports of goods and nonfactor services.

estimated at 2.6 percent in mid-1984. 1/ The pickup in economic activity and the more efficient use of labor have resulted in a significant increase in productivity. Together with the slowdown in wage increases, this has led to a substantial moderation in the increase in unit labor costs. In 1983, the unit labor cost in manufacturing rose by only 5 percent, compared with an annual average increase of 13 percent during 1980-82.

Owing to a rapid increase in exports of goods and services, Singapore was able to gradually reduce its external current account deficit from the equivalent of 14 percent of GDP in 1980 to less than 9 percent in 1982 (Table 2). In 1983, the current account deficit narrowed further to less than 6 percent of GDP, mainly as a consequence of a 20 percent growth in non-oil domestic exports and a stagnation in imports. The latter reflected mostly a drawdown of inventories, lower oil prices, and the fall in investment in machinery and equipment. As in the past, net capital inflows exceeded the current account deficit, and gross official reserves rose by US\$0.8 billion. There was a fairly substantial inflow of monetary capital, as banks brought in funds to strengthen their capital base for prudential reasons and to finance their domestic lending operations. The residual item of errors and omissions turned from an approximate balance in 1982 to a relatively large outflow in 1983. The authorities believe that this is largely due to a net repayment of suppliers' credits as a result of the reduction in the trade account deficit and a net outflow of residents' deposits to Asian Currency Units (ACUs) to take advantage of the strength of the U.S. dollar. 2/ During the first seven months of 1984, official reserves increased further by US\$0.7 billion, bringing the level of reserves to US\$10 billion, or the equivalent of close to six months of retained imports.

## II. Report on Discussions

Discussions focused on near-term prospects and policies against the perspective of an expected slowdown in external demand. Medium-term prospects are reviewed in the light of recent developments.

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1/ Unemployment in Singapore mostly represents frictional (in-between jobs) unemployment. An unemployment rate of less than 4 percent can be regarded as a situation of full employment. Guest workers have been a significant source of labor for the economy of Singapore, particularly in the construction sector.

2/ ACUs are separate bookkeeping units of financial institutions operating in the Asian Dollar Market (ADM). For a description of the ADM, see the associated Recent Economic Developments report.

Table 2. Singapore: Balance of Payments, 1980-85 <sup>1/</sup>

(In billions of U.S. dollars)

|  | 1980        | 1981        | 1982        | 1983        | 1984        | 1985<br>Staff<br>Proj. |
|--|-------------|-------------|-------------|-------------|-------------|------------------------|
| Exports, f.o.b.                        | 18.2        | 19.6        | 19.4        | 20.3        | 22.7        | 24.0                   |
| Of which:                              |             |             |             |             |             |                        |
| Non-oil domestic exports <sup>2/</sup> | 5.4         | 6.0         | 5.6         | 6.6         | 7.9         | 8.7                    |
| Imports, f.o.b.                        | -22.4       | -25.8       | -26.2       | -26.2       | -27.2       | -28.4                  |
| Of which:                              |             |             |             |             |             |                        |
| Non-oil retained imports <sup>2/</sup> | -11.2       | -12.3       | -12.7       | -12.8       | -13.1       | -13.8                  |
| Trade balance                          | -4.2        | -6.2        | -6.8        | -5.9        | -4.5        | -4.4                   |
| Services and transfers (net)           | 2.7         | 4.8         | 5.5         | 4.9         | 4.3         | 4.3                    |
| Current account balance                | <u>-1.5</u> | <u>-1.4</u> | <u>-1.3</u> | <u>-1.0</u> | <u>-0.2</u> | <u>-0.1</u>            |
| Capital (net)                          | 1.7         | 2.3         | 2.2         | 2.7         | 2.2         | ...                    |
| Nonmonetary sector (net)               | 1.6         | 1.8         | 1.9         | 1.4         | 1.3         | ...                    |
| Private (net)                          | 1.6         | 1.8         | 1.9         | 1.5         | 1.3         | ...                    |
| Of which: Direct investment            | 1.7         | 1.9         | 1.8         | 1.4         | 1.3         | ...                    |
| Official                               | --          | --          | --          | -0.1        | --          | ...                    |
| Commercial banks (net)                 | 0.1         | 0.5         | 0.3         | 1.3         | 0.9         | ...                    |
| Foreign assets                         | -0.4        | -1.8        | 0.4         | -0.8        | ...         | ...                    |
| Foreign liabilities                    | 0.5         | 2.3         | -0.1        | 2.1         | ...         | ...                    |
| Errors and omissions <sup>3/</sup>     | 0.5         | 0.1         | --          | -1.0        | -0.7        | ...                    |
| Overall balance                        | <u>0.7</u>  | <u>1.0</u>  | <u>0.9</u>  | <u>0.8</u>  | <u>1.2</u>  | <u>...</u>             |
| <u>Memorandum items:</u>               |             |             |             |             |             |                        |
| Current account balance/GDP (in %)     | -13.8       | -10.2       | -8.7        | -5.7        | -1.4        | -0.5                   |
| Official reserves (end-period)         | 6.6         | 7.5         | 8.5         | 9.3         | 10.5        | ...                    |
| (In months of retained imports)        | 4.5         | 4.3         | 4.8         | 5.4         | 6.0         | ...                    |

Sources: Data provided by the Singapore authorities and staff estimates.

<sup>1/</sup> Totals may not add up to components due to rounding.

<sup>2/</sup> Excluding entrepot trade.

<sup>3/</sup> Including valuation changes .

1. Growth and balance of payments

Aggregate output growth in the fourth quarter of 1984 is expected to have been dampened by the slackening of economic activity in the United States. Moreover, the decline in private construction activity appears to have continued. Nevertheless, on the strength of the buoyant economic performance in the first three quarters of the year, the authorities' projection of an 8.5 percent increase in real GDP for 1984 should be achieved.

Singapore's growth prospects for 1985 depend to a large extent on developments in world demand, particularly in the United States. Present prospects are that the U.S. economy will grow significantly less in 1985 than in 1984. In addition, the oversupply of private residential and office space, as well as the emergence of an excess hotel capacity, are likely to continue to depress private construction activity. The authorities indicated that the Government did not intend to take any countercyclical measures in 1985--as it had done in 1982--to compensate for the expected weakening of external demand and private construction. Although moderating, external demand was still expected to grow; furthermore, with the public housing program close to reaching a peak, the scope for stepping up public investment programs had become more limited. On this basis and assuming an economic growth of about 3 percent in the United States, the staff projects a rate of growth of approximately 6 percent for the Singapore economy in 1985, still a respectable growth by most standards. The authorities are expecting a broadly similar growth rate.

There has been concern that as a result of the oil glut and the expansion of oil refining capacity in neighboring countries and the Middle East, Singapore's petroleum industry was heading toward a prolonged slump. However, following a decline in 1982-83, the volume of petroleum exports rebounded in 1984, and the authorities are now somewhat more sanguine about the industry's prospects. They believe that the role of Singapore as a "swing" refiner, balancing the supply of and demand for refined products in the region will grow. <sup>1/</sup> In line with this, Singapore has been upgrading its refineries to provide more conversion facilities. In addition, Singapore is well placed to maintain its role as an oil trade center for the region.

Balance of payments estimates for 1984 made by the staff indicate a 12 percent growth in total exports (20 percent in domestic non-oil exports) and a 4 percent increase in imports. Although the net surplus on the services account is estimated to decline further, partly because of a fall in receipts from shipping services and oil bunkering, the

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<sup>1/</sup> Singapore enjoys a strategic advantage as it is near to regional markets. Crude oil can be shipped economically from the Middle East in large tankers, and the refined products can be distributed from Singapore in smaller quantities to satisfy the specific needs of countries in the region.

current account deficit is expected to be reduced to about US\$0.2 billion (1 percent of GDP). Capital inflows are expected to exceed the current account deficit and the overall balance is estimated to record a surplus of about US\$1.2 billion, raising official reserves to the level of six months of retained imports. Although there are no official balance of payments estimates for 1984, the authorities are in broad agreement with the staff estimates.

For 1985, the staff projects a halving in the rate of growth of exports in line with the anticipated weakening of external demand. With no significant change in the rate of expansion of imports and in the services account balance, the current account deficit is projected to decline to US\$0.1 billion. The authorities emphasized the uncertainties about external demand, but agreed that some improvement in the current account might take place if foreign demand grows as presently forecast.

## 2. Fiscal policy

One of the features of the government budgets has been the realization of consistent overall surpluses, even though the original budget estimates have always forecast deficits. The 1984/85 budget (April-March) again forecast a sizable deficit, but the authorities have indicated that, as in the past, revenue would be higher and expenditure lower than foreseen in the budget (Table 3). They believe that the likely outcome will be an approximate balance or a small overall surplus. Staff projections indicate that the 1984/85 budget is likely to show a surplus of at least S\$0.3 billion (0.8 percent of GDP), compared with a surplus of S\$0.7 billion recorded in 1983/84. <sup>1/</sup> Including the growing surplus funds of the CPF and the POSB, the overall financial operations of the Government will continue to exert a sizable contractionary impact on domestic liquidity.

The 1985/86 budget is still under preparation, but the authorities indicated that there would be no change in the traditional prudent fiscal stance. In recent years, the Government has taken advantage of the buoyant tax structure to grant tax concessions to the private sector with a view to increasing incentives. This policy will continue, as a further reduction of about 10 percent in the personal income tax rates has already been announced. <sup>2/</sup> In addition, there might be some fine tuning of other incentives. On the expenditure side, the expansion of development outlays is likely to decelerate as a consequence of the slowing of the public housing program. The authorities anticipate that the growing trend of expenditures as a ratio of GDP will level off in the coming years, as major infrastructure projects are being completed.

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<sup>1/</sup> For an explanation of the methodology used for forecasting revenue and expenditure, see Annex I in the Recent Economic Developments report.

<sup>2/</sup> In the 1984/85 budget, a rebate of 10 percent was given on personal income tax in respect of the first S\$10,000 of taxable income. This rebate is expected to be maintained in future years.

Table 3. Singapore: Government Budgetary Operations,  
1979/80-1984/85 <sup>1/</sup>

|                                    | 1979/80     | 1980/81     | 1981/82     | 1982/83     | 1983/84     | 1984/85     |                |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
|                                    |             |             |             |             |             | Budget      | Staff<br>proj. |
| (In billions of Singapore dollars) |             |             |             |             |             |             |                |
| Total revenue                      | <u>4.9</u>  | <u>6.4</u>  | <u>8.5</u>  | <u>9.8</u>  | <u>11.5</u> | <u>11.2</u> | <u>13.1</u>    |
| Tax                                | 3.4         | 4.3         | 5.4         | 6.4         | 7.1         | 7.1         | 8.0            |
| Nontax                             | 1.5         | 2.1         | 3.1         | 3.4         | 4.4         | 4.1         | 5.1            |
| Total expenditure                  | <u>4.7</u>  | <u>6.1</u>  | <u>7.6</u>  | <u>9.0</u>  | <u>10.8</u> | <u>14.9</u> | <u>12.8</u>    |
| Current                            | 3.1         | 3.7         | 4.3         | 5.0         | 5.9         | 7.4         | 6.6            |
| Development                        | 1.6         | 2.4         | 3.3         | 4.0         | 4.9         | 7.5         | 6.2            |
| Overall surplus<br>or deficit (-)  | 0.2         | 0.3         | 0.9         | 0.8         | 0.7         | -3.7        | 0.3            |
| (In percent of GDP)                |             |             |             |             |             |             |                |
| Total revenue                      | <u>24.2</u> | <u>26.6</u> | <u>29.7</u> | <u>30.7</u> | <u>32.6</u> | <u>28.6</u> | <u>33.6</u>    |
| Total expenditure                  | <u>23.0</u> | <u>25.2</u> | <u>26.3</u> | <u>28.1</u> | <u>30.6</u> | <u>38.2</u> | <u>32.8</u>    |
| Overall surplus<br>or deficit (-)  | 1.2         | 1.4         | 3.3         | 2.6         | 2.0         | -9.6        | 0.8            |

Sources: Data provided by the Singapore authorities; and staff projections.

<sup>1/</sup> The fiscal year runs from April 1 through March 31.

### 3. Monetary policy

Since Singapore's financial markets are closely linked to international financial markets, the ability of the authorities to pursue an independent monetary policy is severely constrained. Under these conditions, the authorities have sought to maintain a strong and stable currency and have allowed the domestic money supply and interest rates to move under the influence of market forces. With government operations continuously in surplus and absorbing domestic liquidity, the excess demand for liquidity has had to be met by inflows of funds from abroad. To avoid excessive appreciation of the currency, the MAS has provided liquidity to the banking system through foreign exchange swap transactions and direct purchases of foreign exchange from banks. This has sustained the growth of reserve money and domestic liquidity. 1/

In this setting, while the long-term trend in monetary aggregates is largely influenced by the underlying economic conditions, the monetary operations have resulted in substantial short-term fluctuations in these aggregates. 2/ The authorities are not particularly concerned about such fluctuations, since they have not detected any discernible impact on domestic interest rates which are primarily influenced by movements in foreign rates. In 1983, the average rate of growth of M2 increased to 16.5 percent (14 percent in 1982), reflecting the acceleration in the growth of the economy. During the first nine months of 1984, M2 increased at an annual rate of 10 percent, broadly in line with the growth of nominal GDP.

Movements in domestic interest rates closely follow those of foreign rates, but the level of the former has been consistently below that of the latter (Chart 4) because of the persistent premium on the Singapore dollar and the differential in statutory reserve requirements on domestic and foreign currency liabilities. 3/ However, taking into account these two factors, the covered differential between domestic and foreign rates has been less than 1 percent. The existence of a difference in reserve requirements has posed some problems for domestic monetary management, as banks have engaged in so-called "round-tripping," substituting foreign liabilities for domestic liabilities in

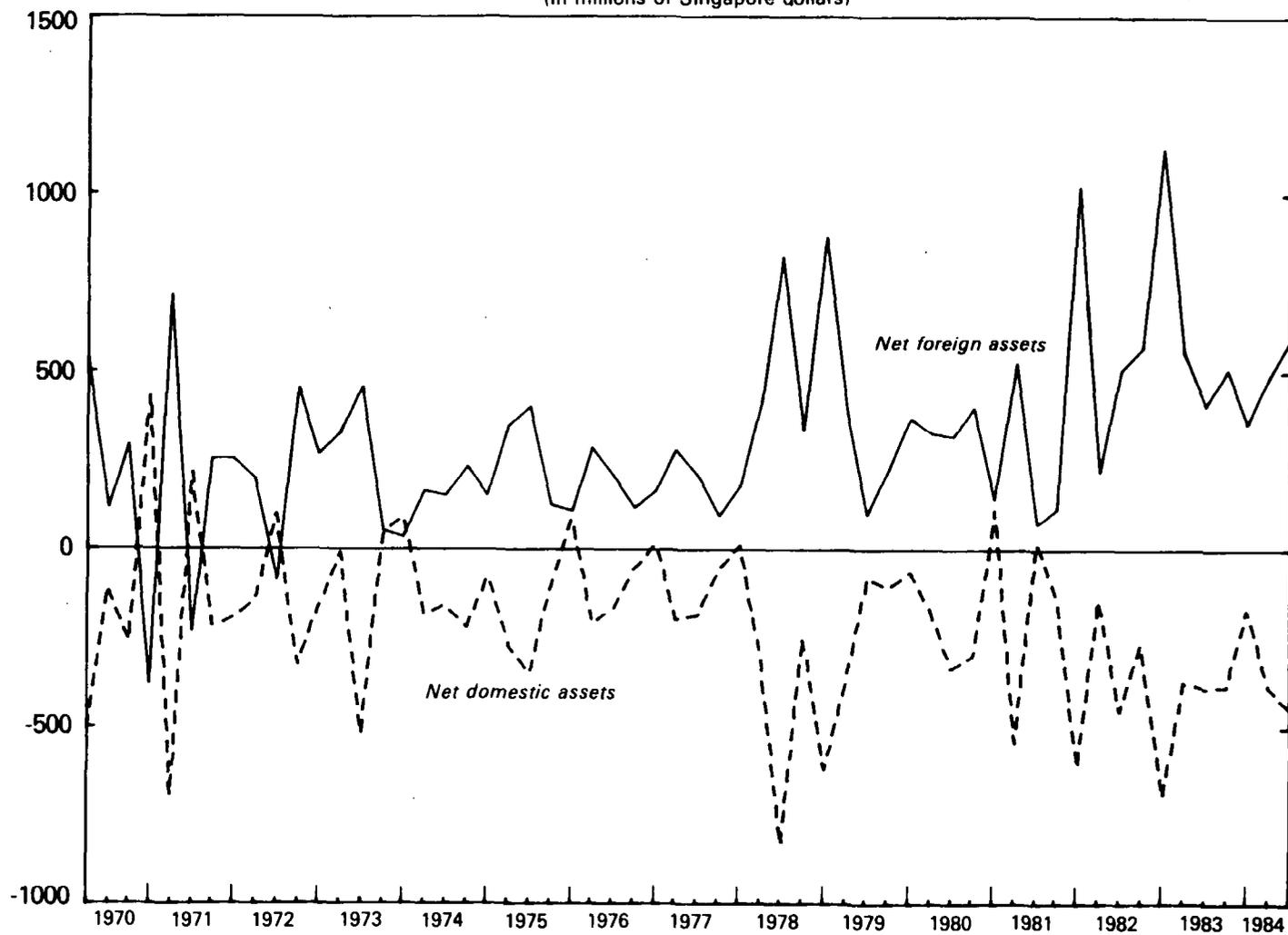
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1/ In the short run, the increases in the net foreign assets of the MAS have been closely linked to the contractionary impact of the growth in government deposits with the MAS (Chart 3).

2/ For instance, during 1983-84, the annual rate of growth of M2 varied from 22 percent in June 1983 to 9 percent in June 1984.

3/ There are no reserve requirements on foreign currency deposit liabilities, while domestic currency deposit liabilities are subject to a cash ratio of 6 percent and a two-tier liquid asset ratio of 20 percent. At present levels of interest rates, this leads to approximately a one-point differential in favor of the foreign interest rate.

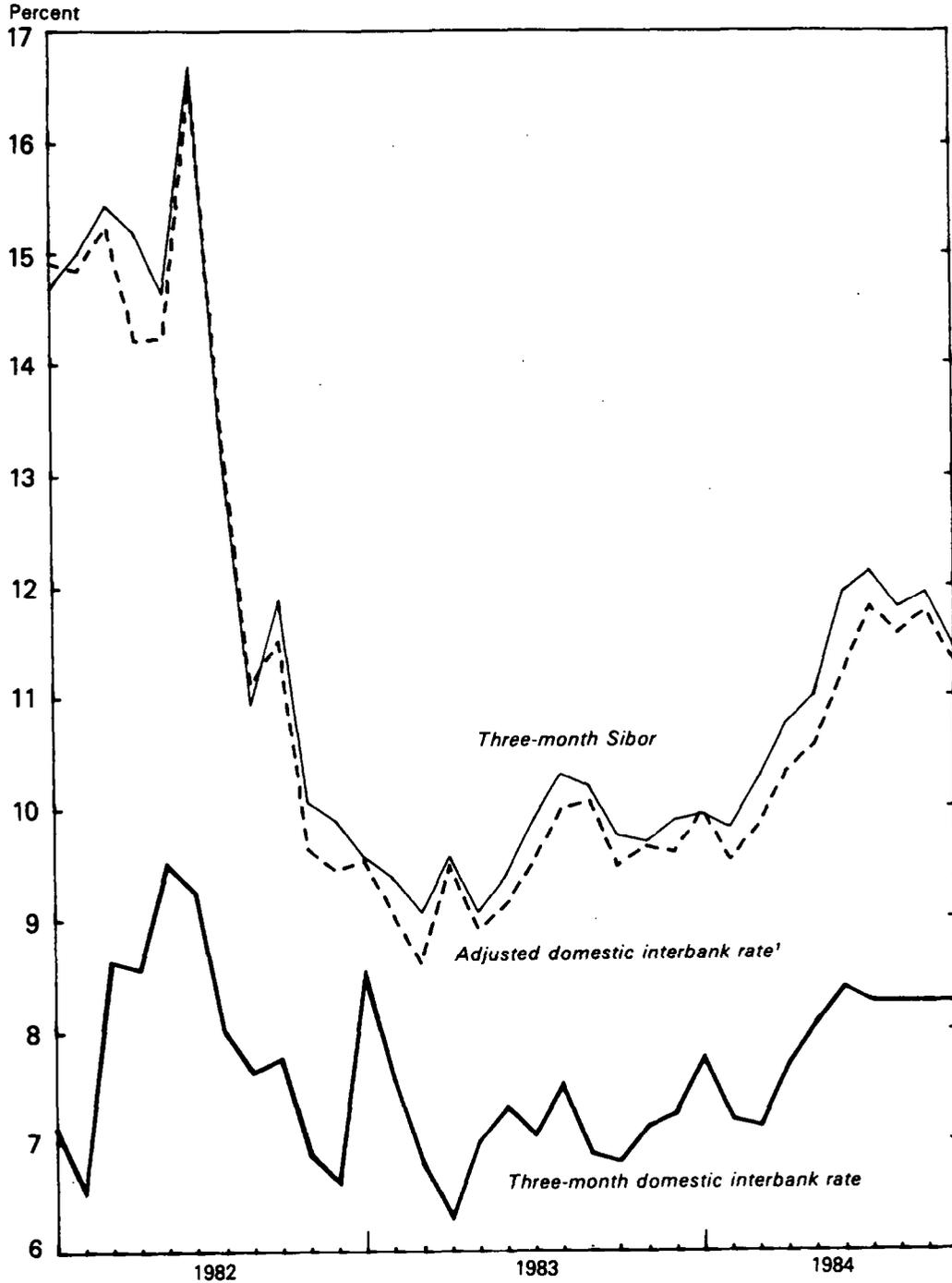
CHART 3  
SINGAPORE  
CHANGES IN ASSETS OF THE MONETARY AUTHORITY, 1970-84  
(In millions of Singapore dollars)



Source: IMF, *International Financial Statistics*



CHART 4  
SINGAPORE  
COMPARISON OF DOMESTIC AND  
FOREIGN INTEREST RATES, 1982-84



Source: Data provided by the Singapore authorities.  
<sup>1</sup>The three-month domestic interbank rate adjusted for the forward premium on the Singapore dollar and for reserve requirements.



order to avoid the reserve requirements. The authorities indicated that this practice, which had been prevalent in 1981 and early 1982, had been brought under control through moral suasion and the imposition of fines.

#### 4. Asian Dollar Market

In line with the general slowdown of offshore activity in other financial centers, reflecting in part the international debt problems, the growth of the Asian Dollar Market (ADM) declined substantially over the past two years. Total assets of the ADM grew by 8 percent in 1983, compared with 20 percent and 58 percent in 1982 and 1981, respectively. However, there have been signs of improvement in 1984, with assets growing at an annual rate of 14 percent (to US\$128 billion) during the first nine months of 1984.

One of the major functions of the ADM has been to channel funds to finance regional external current account deficits. With these deficits declining, regional lending is expected to slow down, but the authorities hope that Singapore's share in lending to other regions will increase. Several measures have been taken in the recent past to encourage the development of Singapore as a center for offshore loan syndication and fund management activities. A tax holiday scheme for income earned from offshore loan syndication was introduced in 1983 and was extended in 1984 to cover the syndication of other financial facilities, such as guarantees and underwriting. Also in 1983, the Government introduced a tax exemption scheme for offshore fund management.

#### 5. External policies

Exchange rate policy has aimed at balancing the twin objectives of maintaining domestic price stability and safeguarding export competitiveness. In recent years, the Singapore dollar has been appreciating in both nominal and real effective terms (Chart 5), but since 1982, the rate of appreciation has slowed. Nevertheless, there has been a significant cumulative appreciation of the Singapore dollar over the past four years. Between end-1980 and October 1984, the appreciation was 22 percent in nominal effective terms and 14 percent in real terms adjusted for relative rates of inflation; the effective exchange rate adjusted for relative unit labor costs in manufacturing rose even more, reflecting to a large extent the authorities' wage correction policy.

The authorities' view is that the appreciation of the exchange rate had mitigated the impact of external inflation. Regarding its effect on external competitiveness, the signals were mixed. Although some exports appeared to have been adversely affected by the loss of competitiveness, such as labor-intensive products, this was in line with their objective of economic restructuring. On the other hand, despite the appreciation, other exports had done well, such as high-tech goods, which were

precisely those the Government wished to encourage. In these circumstances, and given the strength of the balance of payments, the authorities did not anticipate any major shift in the orientation of exchange rate policy during the coming year.

The authorities expressed strong concern about the resurgence of protectionist tendencies abroad. They stated that nontariff barriers were particularly worrisome, as the exact nature of such barriers was often difficult to ascertain. Another important source of concern was a slowdown in direct foreign investment, which reflected in part a worldwide tendency of investors to direct their investment to countries where the markets were located in order to circumvent trade barriers. Thus, protectionism was not only affecting Singapore's exports, but direct foreign investment and the transfer of technology as well.

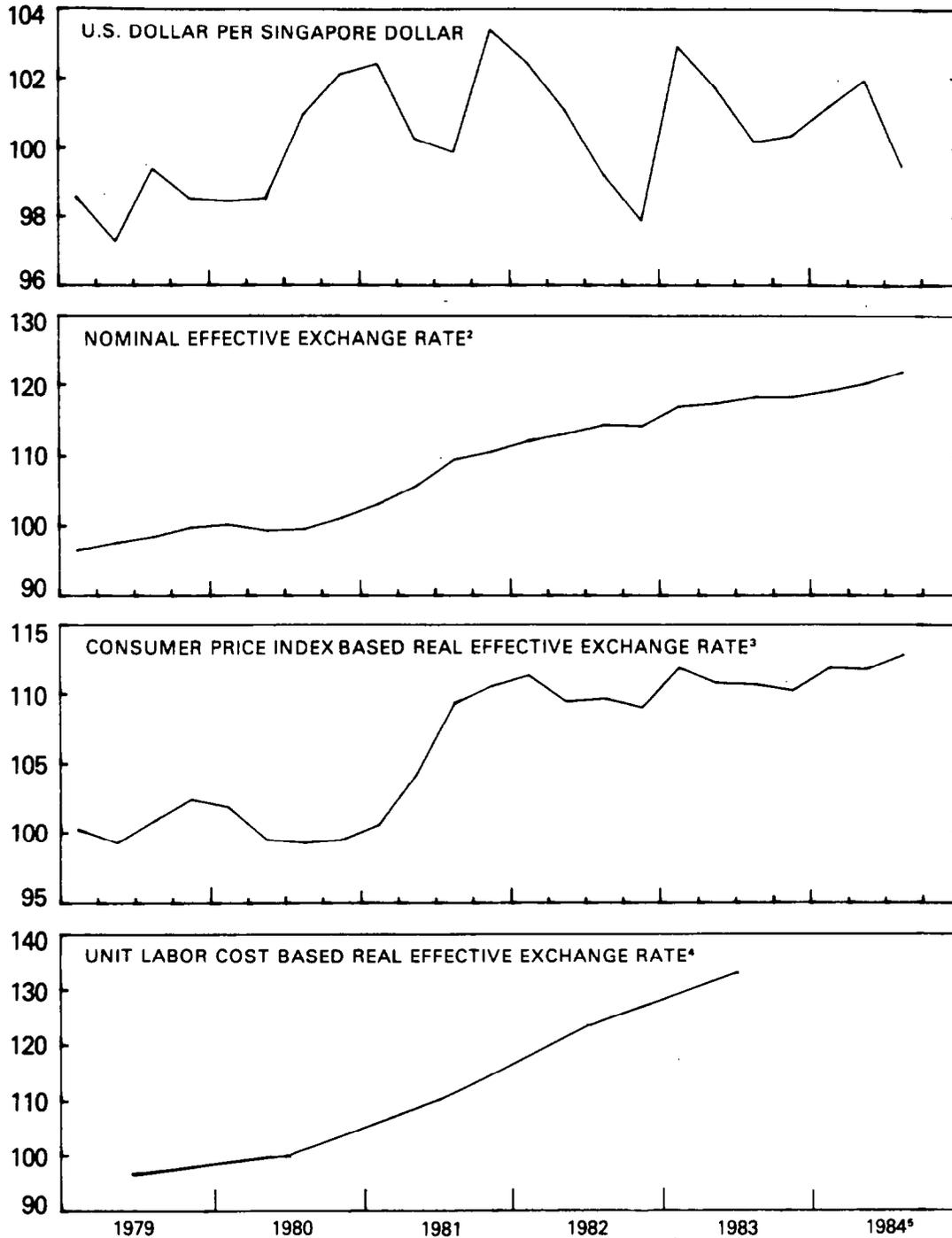
As an open economy with no capital controls, Singapore needs a relatively high level of external reserves to maintain confidence. The current level of official reserves is regarded by the authorities as adequate. In 1981, the Government of Singapore Investment Corporation (GSIC) was established with the objective of diversifying the Government's investment portfolio abroad. The level and composition of GSIC's holdings are considered confidential, but the authorities have indicated that the liquid portion of its foreign assets holdings was included in official reserves. The authorities viewed GSIC investments as the counterpart of CPF surplus funds invested abroad. Given the young age profile of the population, the CPF was likely to remain in surplus for some years to come and, hence, the transfer of funds to the GSIC was expected to continue.

#### 6. Medium-term prospects

The substantial decline in the external current account deficit in 1983-84 and the further improvement projected for 1985 is the combined result of a surge in exports and a modest increase in imports, the latter due mostly to the slowdown in manufacturing investment, reflecting largely excess capacity. However, as capacity utilization increases, investment and hence imports are likely to pick up. Together with the anticipated sluggishness in the rate of growth of external demand, this is projected by the staff to lead to a widening of the current account deficit after 1985. However, the deficits are expected to remain relatively modest through 1988 (Table 4).

Singapore's growth prospects remain heavily dependent on developments in the international economy. This dependence could increase in the future, as the scope for relying on the traditional domestic sources of growth--housing and infrastructure--become more limited as the basic needs in these areas are met. The authorities are determined to continue their efforts toward technological upgrading, which has enabled Singapore to take advantage of the most dynamic sectors of world demand. The sharp increase in the exports of computer-related products

CHART 5  
SINGAPORE  
INDICES OF EXCHANGE RATES, 1979-84<sup>1</sup>  
(1980 = 100)



Sources: Data provided by the Singapore authorities and staff estimates.  
<sup>1</sup>An increase in the index indicates an appreciation of the Singapore dollar.  
<sup>2</sup>Based on trade weights.  
<sup>3</sup>Relative consumer prices adjusted for exchange rate changes.  
<sup>4</sup>Relative unit labor costs adjusted for exchange rate changes.  
<sup>5</sup>Preliminary.



Table 4. Singapore: Medium-Term External Current Account Projections, 1985-88

|                             | 1985  | 1986  |       | 1987  |       | 1988  |       |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|
|                             |       | I     | II    | I     | II    | I     | II    |
| <u>(Percentage changes)</u> |       |       |       |       |       |       |       |
| <u>Assumptions</u>          |       |       |       |       |       |       |       |
| Real GDP                    | 6.0   | 6.0   | 7.0   | 6.0   | 7.0   | 6.0   | 7.0   |
| GDP deflator                | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |
| U.S. real GNP <u>1/</u>     | 3.0   | 3.0   | 4.0   | 3.0   | 4.0   | 3.0   | 4.0   |
| Export unit value           | -1.4  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Import unit value           | -1.2  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Terms of trade              | -0.2  | --    | --    | --    | --    | --    | --    |
| Total exports <u>1/</u>     | 5.7   | 6.8   | 8.3   | 6.8   | 8.3   | 6.8   | 8.3   |
| Total imports <u>2/</u>     | 4.4   | 7.5   | 8.5   | 7.5   | 8.5   | 7.5   | 8.5   |
| <u>(In percent of GDP)</u>  |       |       |       |       |       |       |       |
| Trade account deficit (-)   | -22.0 | -22.7 | -22.0 | -23.1 | -21.8 | -24.1 | -22.3 |
| Current account             | -0.5  | -2.3  | -1.8  | -3.4  | -2.5  | -5.1  | -3.8  |

Source: Staff projections.

1/ Non-fuel domestic exports have been found to be strongly related to demand in the United States. For estimation of an export function, see Annex I in the Recent Economic Developments report.

2/ For estimation of an import-demand function, see Annex I in the Recent Economic Developments report.

over the past two years is evidence that these efforts have met with success. As the computer industry had to respond to a rapid expansion in world demand, it required quick start-up operations. Singapore was able to accommodate this requirement with its well-developed infrastructure and free and flexible environment, and the Government hopes to attract more of such "sunrise" industries.

Singapore has been able to maintain a high rate of investment thanks to the successful mobilization of foreign investment and domestic savings. However, it appears that foreign investment might be more sluggish in the future, partly because of the protectionist tendencies referred to above, and partly because the competition for such investment is increasing as other developing countries are intensifying their efforts to attract such investment. At the same time, with domestic savings already high, the scope for raising the level of domestic savings further is becoming more limited. Therefore, the extent to which Singapore will be able to sustain a rapid economic growth will depend in part on the productivity of investment. The authorities believe that as the economy matures into increasingly skill- and technology-oriented activities, the productivity of investment will be increasing. Another factor that could affect Singapore's growth potential is labor constraint. The Government has announced a policy of repatriating foreign workers by 1990. The authorities realize that there could be trade-offs between this policy and future growth and therefore intend to implement the repatriation program with flexibility.

### III. Staff Appraisal

The developments in the past few years have once again demonstrated the resilience of the Singapore economy: Singapore was able to weather the world recession and the international debt crisis without major disruption to its economy and was also able to respond quickly to and benefit from the upturn in world demand. There are many reasons for the economic success of Singapore, but the Government's policies--characterized by prudent financial management, the provision of appropriate incentives, and a drive to continuously upgrade the economy--have played a crucial role. There are no signs that the authorities' commitment to these policies is weakening in any way. It is, therefore, not surprising that the staff has no significant differences of view with the authorities regarding their macroeconomic policies.

On the strength of buoyant external demand, particularly for high-technology goods, Singapore's economic growth accelerated to an average annual rate of about 8 percent during 1983-84. As a consequence of an anticipated slackening of economic activity in the United States, growth is projected to slow to approximately 6 percent in 1985. Price increases have remained negligible over the past two years and there are no underlying inflationary pressures in the economy. The Government's financial operations are expected to continue to exert a contractionary

impact on domestic liquidity which will induce inflows of funds from abroad. The external current account deficit narrowed substantially in 1983 and further declines are projected in 1984 and 1985.

In conducting their exchange rate policy, the authorities have pursued the twin objectives of mitigating the impact of external inflation and protecting competitiveness. There has been a continuous real appreciation of the Singapore dollar since 1980 which has been consistent with the achievement of the authorities' objectives. Total exports have been doing well over the past two years and the overall balance of payments position has remained strong. It is true that the performance of exports has been uneven, but in the main this should be seen as a successful adaptation to the changing pattern of external demand and comparative advantages. Nevertheless, given the uncertainties about the future strength of external demand and the fact that the growth of exports has not been broad based, the slowdown in the rate of appreciation of the Singapore dollar during the past two years is appropriate.

The staff commends the authorities for the maintenance of a free trade and exchange system, which has served Singapore well. Given the authorities' continued commitment to prudent financial policies and their proven ability to adapt to the changing international comparative advantages, Singapore's growth potential remains substantial. But the realization of this potential depends on the sustained growth of world trade. The staff shares the authorities' concern about the resurgence of protectionist tendencies worldwide. This is affecting not only Singapore's exports, but apparently also foreign direct investment, which has been an effective vehicle for the transfer of skill and technology and a major contributor to the rapid economic growth of the country.

It is recommended that the next Article IV consultation with Singapore be held by June 1986.

Singapore--Fund Relations

(As of November 30, 1984)

I. Membership status

- (a) Date of membership: August 3, 1966  
 (b) Status: Article VIII

A. Financial Relations

(Amounts in millions of SDRs, unless otherwise indicated)

II. General Department

- (a) Quota: 92.4  
 (b) Fund holdings of Singapore dollars 25.1 (27.1 percent of quota)  
 (c) Fund holdings of currency subject to repurchases: --  
 Of which: Credit tranches --  
 Special facilities: --  
 (d) Reserve tranche position: 72.9  
 (e) Current operational budget (maximum use of currency): 16.6

|                          | <u>Limit</u> | <u>Outstanding</u> | <u>Uncalled</u> |
|--------------------------|--------------|--------------------|-----------------|
| (f) Lending to the Fund: | --           | --                 | --              |
| GAB) --                  | --           | --                 | --              |
| SFF) --                  | --           | --                 | --              |
| Enlarged access)         | --           | --                 | --              |
| Total) --                | --           | --                 | --              |

III. Current Stand-by or Extended Arrangement and Special Facilities

- (a) Current stand-by or extended arrangement: None.  
 (b) Previous stand-by or extended arrangement: None.  
 (c) Special facilities (the current and past two years): None.

IV. SDR Department

- (a) Net cumulative allocation: 16.5  
 (b) Holdings: 55.9 (339.2 percent of cumulative allocation)  
 (c) Current Designation Plan (amount of maximum designation): None.

V. Administered Accounts

- |                          |       |
|--------------------------|-------|
| (a) Trust Fund loans:    | None. |
| (i) Disbursed:           | None. |
| (ii) Outstanding:        | None. |
| (b) SFF Subsidy Account: | None. |
| (i) Donations:           | None. |
| (ii) Loans to Fund       | None. |
| (iii) Payments to Fund   | None. |

VI. Overdue Obligations to the Fund:

- |                         |               |       |
|-------------------------|---------------|-------|
| (a) General Department: | Repurchases - | None. |
|                         | Charges -     | None. |
| (b) SDR Department:     | Charges -     | None. |
| (c) Trust Fund:         | Repayments -  | None. |
|                         | Interest -    | None. |

VII. Singapore has not used Fund resources from its membership to date

B. Nonfinancial Relations

VIII. Exchange rate arrangements:

The Singapore dollar is pegged to an undisclosed composite of currencies of Singapore's major trading partners. As of November 30, 1984, US\$1 = S\$2.15 and SDR 1 = S\$2.15.

IX. Last Article IV consultation:

Held in Singapore during August 15-27, 1983; Executive Board discussed the staff report (SM/83/217) on November 16, 1983.

X. Technical Assistance: None.

XI. Resident Representative/Advisor: None.