



**CENTRAL BANK OF TRINIDAD
AND TOBAGO**



**CARIBBEAN CENTRE FOR
MONETARY STUDIES**

**XXVIIIth ANNUAL CONFERENCE
ON MONETARY STUDIES**

**THE IMPACT OF INCREASING GOVERNMENT DOMESTIC DEBT
ON THE DEVELOPMENT OF THE CAPITAL MARKET
IN JAMAICA 1980-1995**

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*October 28 - November 1, 1996
Conference Facilities - 16th Floor, Central Bank of Trinidad & Tobago*

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The views expressed in this paper are those of the Author and do not necessarily reflect the views of the Bank of Jamaica.

**BANK OF JAMAICA
OCTOBER 1996**

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INTRODUCTION

Financial markets are defined to include the money market, bond market, capital market and the stock exchange. Financial markets serve as intermediaries between savers and investors and mobilize a significant portion of domestic savings and is, therefore, one of the primary sources of economic growth in many economies.

A review of growth rates in a number of countries indicate that a high rate of increase in investment was usually reflected in a high rate of economic growth. Studies of six national capital markets in Latin America showed that relatively stable prices stimulated savings in financial institutions. On the other hand, rapidly increasing price levels act as a deterrent to saving in financial institutions which can only be offset with the introduction of new incentives. Generally, the studies indicated that a reasonable level of monetary stability is one of the main conditions for increasing investment.

However, studies showed that investors decisions were also affected by intangible factors, such as general confidence in the political and social stability of the country, as well as the effectiveness of its development policies.

Efficient financial markets tend to increase the amount of savings transferred from the public to financial institutions, which in turn facilitates the allocation of resources to more productive uses.

Increasingly, public investment has become an important factor in fomenting financial market development. That is, public investments are government savings, defined as a surplus of current revenues over current expenditure. In situations of financial stability and a well organized financial market, central governments can finance deficits through non-inflationary internal borrowing, that is, through attracting and directing private savings into the financing of public investment.

Sometimes, fiscal deficits cannot be financed through non-inflationary internal or external borrowing and governments have to resort to the central bank. Thus creating or aggravating inflationary

pressures. The Jamaican government was faced with the challenge of mobilizing enough savings to finance its investment plan without generating inflationary pressures during the period 1980 - 1985.

The fostering and development of suitable financial institutions to attract and collect savings in a productive way is integral to the development of financial markets. Interest rates paid on savings must also be sufficiently attractive to investors.

For stock exchanges to operate efficiently, the pressure of legal and administrative measures concerning the supervision of stock exchanges and joint stock companies including disclosure, proper auditing and protection of minority stock holders are critical, hence the importance of the Securities Commission in Jamaica.

It has been observed that government's domestic debt has continued to increase over the years, to finance fiscal deficits and to assist the central bank to control the growth of money supply. Government securities are part of financial markets. Increased or decreased supply of government paper on the market, therefore, impacts demand for other investment instruments.

It is in this context that this paper has sought to examine the impact of the growing stock of government debt on capital market developments in Jamaica during the period 1980 - 1995. In order to do this, the paper is divided into four sections.

Section 1, provides the conceptual background regarding the role of financial markets and the economic reasons which cause increases in governments debt.

Section 2, examines the growth in domestic debt since 1980. The economic rationale for the increased supply of government instruments on financial markets is also discussed.

Section 3, analyses financial market developments given the increasing domestic debt over the past fifteen years.

Section 4, provides the conclusion and prospects with respect to future developments in financial markets.

SECTION I CONCEPTUAL BACKGROUND

The primary function of the financial market is to raise funds for investment in long term assets and to provide opportunities for financial investment. Financial markets provide a wide range of investment opportunities for potential investors through the money market (short term), the bond market (medium to long term), capital market (long term) and the stock exchange which facilitates trade in existing equities and shares. The financial market, therefore, has the potential to contribute to economic development by improving the efficiency of the financial sector, increasing the mobilization of savings, improving the allocation of investable funds and widening the scope of instruments and risks for investors (Midgley and Barns: The Capital Market: Its nature significance 1975).

As the Central Bank seeks to maintain an orderly growth of money supply, a stable currency, and to safeguard the viability of the balance of payments, the institution often uses the medium of the financial market to execute its monetary policy. In this respect, the financial market facilitates the financing of government deficits as well as the implementation of monetary policy. The financial market provides a means of converting long-term investments into liquid funds, therefore, giving a foundation of confidence to the process of saving and investment. Given these potential benefits, governments in developing countries have attempted to promote the development of financial markets.

Since government securities form a part of the instruments available on the financial market, increased or decreased supply of these securities will impact the demand for other fund raising instruments. The success of government domestic debt operations is also affected by the intensity of Central Bank's open market operations.

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The Central Bank affects the quantity of money, interest rate and income through the implementation of monetary policy. The purpose of an open market operation is to change the available relative supplies of money and bonds and thereby change the interest rate or yield at which the public is willing to hold this modified composition of assets.

Government domestic debt is increased when fiscal deficits are financed by selling securities to the public or to the Central Bank. The total stock of government securities constitutes a significant proportion of the national domestic debt. Issues of government debt are also made to refinance parts of the national debt that mature.

Debt financing substitutes for taxation. It allows governments to maintain or increase public spending without the need to legislate tax increases in the first instance. Vito Tanzi and Mark Shulz in the article "Interest Rate and Government Debt 1991" advocate that sudden and temporary changes in tax rates generate distortions and thus welfare losses with adverse effects on growth. Continuous debt financing of fiscal deficits can, however, cause the share of public debt in national income to grow. As a consequence, the cost of servicing the debt grows especially if the interest rates are high. When the government uses debt financing from the public to meet deficit financing requirements, the initial contractionary impact is neutral with proceeds of these securities being expended. The impact of debt financing on money supply expansion and the inflation rate is, therefore, neutral in the short run.

The imbalance between government revenue and expenditure can, however, be financed by selling government securities to the Central Bank. This is called money financing of the deficit. Money financing of the government's deficit has an expansionary effect on money supply as the payment for the securities by the Central Bank to the government represents an increase in money in the hands of the private sector. The change in the Central Bank's holdings of treasury debts cause a corresponding change in high powered money. It is in this sense that the Central Bank monetizes the debt (Dornbusch and Fischer: Macroeconomics). As a result of the immediate liquidity and inflationary implications of money financing,

the use of debt financing by government instead of money financing is usually recommended.

The fiscal and monetary policy being pursued will affect capital demand and thus investment spending. A high tax, low government - spending policy keeps the real interest rate low and encourages the demand for financial instruments and, therefore, investment spending. A high government spending, low-tax policy that produces large deficits raises the real interest rate and discourages the demand for capital.

Monetary policy, however, impacts on the demand for financial instruments by affecting the market interest rate. Restrictive monetary policy which implies an increase in the supply of government securities in the financial market leads to higher and more attractive interest rates since the government faces competition from alternative investment opportunities. Consequently, investors are encouraged to switch financial resources from high risk investments activities for example, the stock market investments, to risk free government paper.

SECTION II

GROWTH OF DOMESTIC DEBT IN JAMAICA SINCE 1980

A country's domestic debt will grow in the context of fiscal deficits which are continuously financed through the issuing of government securities. In addition, as the monetary authorities or Central Bank attempts to use indirect instruments, especially open market operations, to control the quantity of money, interest rate and income, the government may have to issue domestic debt where there is an absence of Central Bank instruments. This chapter will examine the growth in domestic debt through the main debt instruments, Treasury Bills (short term) and Local Registered Stock (medium to long term). The economic situation which has contributed to the debt stock expansion will also be discussed.

1980 - 1985

In the main, the growth in government domestic debt during 1980-85 occurred to fund the persistent budget deficits of the central government. This debt was mainly in the form of Local Registered Stocks and Treasury Bills. During the review period, central government sustained deficits ranging from approximately 10% of nominal GDP in FY 1980/81, peaking at 17.7% of nominal GDP in FY 1983/84, and declining to 7.2% of nominal GDP in FY 1984/85. Closer examination of the fiscal deficits revealed that, with the exception of 1984, all fiscal deficits were financed by resources from the domestic banking system. Direct loans from the central bank also facilitated deficit financing during this period. The total outstanding stock of government securities increased by 227.6% between FY 1980 and FY 1984/1985. Direct government loans with commercial banks declined significantly from J\$23 million in 1979 to J\$5 million in 1986.

Between 1980-1985 monetary policy operations of the Central Bank relied heavily on direct controls, mainly through variations in the reserve requirements which applied to commercial banks and financial

intermediaries registered under the Financial Institutions Act and to a lesser extent the Bank rate. The Bank rate was then the benchmark interest rate in the financial system. The reserve requirement comprised of a cash reserve ratio and a liquid assets reserve ratio. The liquid assets ratio was comprised of short-term government Treasury Bills and Local Registered Stocks with maturities of ninety days or less. The liquid asset requirement for commercial banks and Licensed Financial Institutions ranged between 34.5% to 48.8% and 15% to 20% respectively during 1980 - 1985. The mandatory requirement of the commercial and near banks to hold statutory reserves above levels required for prudential purposes, provided a captive market for additional financing of the government deficit. This meant that less credit was available to the private sector. Where credit was available, it was extended at relatively high interest rates to compensate for the relatively lower interest rates on Treasury Bills as well as the non-interest bearing cash reserve ratio which financial institutions held to satisfy the statutory liquid assets requirement.

To the extent that funding of public sector deficits was effected through the liquid asset requirement, the development of an active and broad based capital market was retarded. In addition, government securities could not be used by the central bank in the conduct of monetary policy because the interest rates on these instruments were not completely market determined but reflected the need of the institutions to comply with liquid assets requirements. The Central Bank therefore had to resort to the use of direct instruments. This led to an entanglement of monetary and fiscal policy.

As a result, efforts were made in 1985 to reform the financial system with the aim of restoring the Bank of Jamaica to its primary functions. The principal objective of the financial reform was to:

- separate monetary and fiscal policies;
- eliminate distortions in the financial market;
- create a fiscal and institutional environment which would strengthen the money and capital market.

This financial reform which was evolved with the assistance of

the World Bank sought to emphasize base money management by the Central Bank. Base money management was to be effected through open market operations. Since interest rates on government paper were not completely market determined, the Central Bank in November 1985 introduced, its own instruments called Certificates of Deposit which were to be used extensively to control money supply.

In addition, efforts were made on the part of the authorities to reform fiscal operations, with the aim of controlling fiscal deficits through increases in revenue as well as reductions in expenditure.

1986 - 1990

During 1986 - 1988, the growth in domestic debt mainly facilitated the financing of fiscal deficits. Post 1988, saw increasing government domestic debt to assist with the absorption of liquidity stemming from unspent reinsurance flows in an environment which mirrored speculative forces, and led to depreciations of the Jamaican currency.

The central government operations resulted in deficits in FY 1985/1986, 1986/1987 and 1988/1989 (see table II). These deficits were mainly financed by the domestic banking system's increased holdings of government securities. However, in FY 1988/1989 after the advent of Hurricane Gilbert, external loan inflows helped to offset the shortfall in government's revenues. The internal domestic debt of the country as measured by the outstanding nominal stock of Treasury Bills and Local Registered Stock grew from 39.5% of real GDP at the end of FY 1984/85 to 48.7% of real GDP by the end of FY 1988/1989. Notwithstanding the increased domestic debt at the end of FY 1987/1988, the fiscal budget attained a small surplus resulting from increased revenue inflows. The liquid asset requirements related to commercial banks and Licensed Financial Institutions were reduced from 38% and 25% at the end of March 1987 to 25% and 9% at the end of March 1988, respectively, consistent with the objectives of the financial sector reform programme.

The Central Bank issued its own Certificates of Deposit to control liquidity in the financial system. However, in the absence

of sufficient instruments to undertake the required level of open market operations, the government increased the Treasury Bills ceiling from \$2.5bn to \$3.5bn in October 1988 to assist the Central Bank in absorbing liquidity from the system. There was an increasing emphasis on indirect monetary controls in the post September 1988 period consistent with the agreement of the financial sector reform programme.

High levels of liquidity associated with the post hurricane period starting September 1988 continued into FY 1989/1990. The result was an increase in normal credit demand due to:

- post electoral resumption of investment;
- continued post-hurricane re-tooling;
- shortening of payments via car import programme;

To prevent adverse balance of payments consequences, the Central Bank pursued a restrictive monetary policy through aggressive open market operations. Government continued to issue Treasury Bills and Local Registered Stock to assist the Central Bank in containing money supply and ultimately the inflation rate. In addition, credit ceilings were imposed on financial institutions and the floor on savings deposit rate was increased by 5%. This translated into increases in all interest rates. The outstanding stock of government instruments declined to 44.7% of real GDP in FY 1990 reflecting a 4.2% decline over the previous fiscal year. This decline in government securities as a percentage of real GDP was, however, partially offset by an increase in the outstanding stock of Certificates of Deposit to the extent of 0.4% of real GDP by the end March 1990.

For the first three quarters of FY 1989/1990, central government's operations resulted in a deficit. This must, however, be reviewed against the background of increased expenditure following the hurricane of September 1988. The growth in government and Bank of Jamaica instruments reflected the attempts of the authorities to stem the growth of liquidity provided by unspent reinsurance flows.

1991 - 1995

During the period 1990/1991 to 1994/95, central government operations generated surpluses. Notwithstanding the attainment of fiscal surpluses, government domestic debt grew dramatically between 1991/92-1994/95. In FY 1990/1991, the fiscal surplus was 2.7% of real GDP, declining to 2.3% of GDP at the end of FY 1991/1992 and henceforth increasing steadily to approximately 3.6% of real GDP by the end of FY 1994/1995. The expansion in the government domestic debt from 28.6% of real GDP in FY 1991 to 32.3% at the end of FY 1995 was mainly to assist the Central Bank in the control of money supply and ultimately to reduce the rate of inflation. The inflation rate had spiraled in 1991/92 due to sudden fluctuations in the exchange rate resulting from the liberalization process in September 1991 and unprecedented levels of private capital inflows, particularly in FY 1994/1995. The higher than programmed private capital inflows led to a significant over performance in the accumulation of the Net International Reserves of the Bank of Jamaica. This faster accumulation of foreign reserves fueled the growth in money supply and necessitated intense open market activity as well as an "in crowding" from fiscal operations. As a result, the government issued Local Registered Stocks and Treasury Bills to neutralize the liquidity impact of the Net International Reserve accumulation. The proceeds from the issues of these securities were then sterilized in the Bank of Jamaica.

The liberalization of the financial system commenced in the middle of 1990. By September 1991 the liberalization process was further advanced by the abolition of the Exchange Control Act and the introduction of a flexible exchange rate to be determined through a foreign exchange interbank system. This meant that the interplay of market forces guided by the direction of the Central Bank's implementation of monetary policy would determine the exchange rate.

The measures implemented by the Central Bank to curtail money supply growth during FY 1991/1992 mainly involved the use of open market operations through the issuing of Bank of Jamaica Certificates of Deposit. As the monetary stance of the authorities tightened, the

weighted average rate on Certificates of Deposit moved from 18.14% in June 1991 to 44.35% in December of the same year. The ceiling on Treasury Bills was increased from \$3.5 billion to \$4.5 billion in August 1991 to assist with the absorption process and to offset increases in expenditure costs as a result of devaluation, particularly as it affected the repayment of external debt. Treasury Bill discount rates increased from 15.24% in June to 35.06% by the end of December. Speculation triggered the depreciation of the exchange rate from US\$1.00 = J\$8.61 at the end of March 1991 to US\$1.00 = \$27.38 at the end of March 1992. Concurrently, inflation accelerated from 28.26% at the end of March 1991 to 105.7% at the end of March 1992.

By June 1992 the exchange rate was revalued to US\$1.00 = \$22.35 as a result of the continued tightening of monetary policy and a broad-based show of confidence led by a major foreign exchange supplier. The Central Bank continued to pursue aggressive open market operations during the first half of the year in an attempt to maintain exchange rate stability. The decision was also taken by the government to rely less on Bank of Jamaica's Certificates of Deposit and to introduce more of its own instruments in the control of liquidity. Bank of Jamaica's Certificates of Deposit stock, therefore, declined to \$3.4 billion and was offset by increased offerings of Local Registered Stock by the government, the proceeds of which were sterilized in the Central Bank. In this scenario, the non-cash portion of the liquid assets ratio was increased to bring the banking systems total statutory liquid assets requirements to 50% by June. Interest rates on securities and consequently other deposit instruments rose by 10% by December 1992. Subsequently, with the return of relative economic stability Treasury Bill yield rates fell from 43.32% in January 1992 to 19.52% in March 1993. At the end of 1992/93 point-to-point inflation was 21.09%. Foreign exchange capital inflows also exceeded original estimates, providing money growth and supporting trade on the equity market.

Monetary policy tightened during the second half of 1993 against the background of strong inflationary expectations, rising domestic costs associated with real wage adjustments and widening external

current account deficit. Average yield on government Treasury Bills which was 25.0% at March 1993 rose to 42.5% by December 1993. The exchange rate depreciated to US\$1.00 = \$32.70 and inflation for the first nine months of FY 1993/1994 was 26.8%, nine percentage points above the rate attained during the corresponding period of 1992/1993. Consequently, commercial bank's lending rates increased to unprecedented levels from 46.4% in December 1992 to 61.3% in December 1993. Concurrently, by March 1994, gross internal domestic debt rose to 21.9% of real GDP as the government issued securities in support of the central bank's monetary programme.

The central bank continued pursuit of a restrictive monetary policy was accompanied by high interest rates in March 1994. The yield on government short-term securities peaked at 52%. However, interest rates were reduced as inflationary expectations weakened with a noticeable reduction in short-term rates by the end of 1994/95. Open market operations were implemented through reverse repurchase agreements and to a lesser extent Bank of Jamaica's Certificates of Deposit which were fully phased out in March 1995.

With the elimination of Certificates of Deposit, reverse repurchase agreements were the principal tool of open market operations which were utilized by the monetary authorities. Open market operations were undertaken to further secure an economic foundation that would facilitate sustainable growth in the medium term in a situation where foreign exchange inflows and the accumulation of Net International Reserves continued to exceed targeted levels. The government issued Local Registered Stock in support of monetary policy to neutralize the liquidity impact of the faster than programmed accumulation of the Net International Reserves. In order to ensure liquidity neutrality the proceeds of these securities were sterilized in accounts in the Bank of Jamaica as was previously mentioned.

With the resurfacing of speculative elements in the foreign exchange market, the tight monetary stance of the authorities intensified in August 1995, employing both direct and indirect instruments. Selective special deposit requirements for banks were introduced, which constituted the holding of cash and/or Treasury

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Bills in the central bank. This was in addition to the existing statutory liquid asset ratio of 47%. By March 1995, the outstanding stocks of Local Registered Stocks and Treasury Bills amounted to 23.5% of real GDP and 8.8% of real GDP respectively.

SECTION III
FINANCIAL MARKET DEVELOPMENTS
1980 - 1985

Financial markets assist the process of financial intermediation by mobilizing savings to satisfy the financing requirements of domestic investors. Government securities, the main component of domestic debt belong to the group of instruments that are traded on financial markets. Increases or decreases in these instruments on the market will affect the demand for other financial instruments.

The expansion in domestic debt during 1980 - 1985 facilitated the financing of fiscal deficits. This period was also characterized by the availability of a narrow range of instruments on the financial market. These scarce instruments included government of Jamaica Treasury Bills, Local Registered Stocks, commercial bank short-term deposits and short-dated instruments of life insurance companies.

The 127.7% growth in the outstanding stock of Treasury Bills during this period, therefore, contributed to the development of the money market as more short-term instruments were available for trading on the market.

The outstanding stock of Local Registered Stock grew by 217% over the review period, suggesting an expansion in medium to long term investment opportunities. The bonds had a maturity period of approximately 10 years, as they were mainly issued to foster development.

With respect to developments in the capital market, in particular, building societies, an expansion in the Jamaican dollar value of new mortgage loans was observed. In March 1985, building societies provided a total of \$24.5 million in new loans compared to \$14.5 million in March 1980. Given that inflation rate over this period increased by 6 percentage points, the increase in new loans in the capital market in terms of volume could be significant.

It is also important to note that this period was characterized by the crowding out of private sector credit by the public sector through the liquid assets requirement. This also inhibited the development of an active and broad-based capital market as government

savings were almost non-existent during this period.

In addition, during the review period, governments borrowing from the domestic banking system did not reflect the opportunity cost of funds in the economy as government instrument yields were relatively noncompetitive. Consequently, the efficient conduct of open market operations by the central bank was inhibited.

On the part of the stock exchange, money creation resulting from the accessing of direct central bank loans by the government, coupled with the existence of a limited range of alternate investment instruments facilitated a strengthening of trading activities.

Stock market activities strengthened during 1980 - 1985 reflected by growth in the stock exchange index from 56.8 points at the end of March 1980 to 839.3 points at the end of March 1985. In addition to the accommodating macroeconomic environment of 1980 - 1985, stock market activities must be viewed against the background of poor performance during 1974 - 1980, a period which was characterized by expansion of the state sector, economic and political uncertainty and a general lack of private sector confidence in the economy. The resurgence of activity reflected the return of confidence in the economy which was also assisted by the higher than expected profit levels by enlisted companies in 1983 as well as improved information via the print media regarding the stock market and analyses of companies financial statements.

1986 - 1990

As was previously mentioned, up to 1988, the increased supply of government securities in financial markets facilitated the financing of fiscal deficits. Interest rates on Treasury Bills were more reflective of the market following the programme of financial reform. The introduction of Bank of Jamaica Certificates of Deposit in November 1985 to implement open market operations, widened the range of instruments available in the money market. Coupled with the increased supply in Treasury Bills, the introduction of this new Bank of Jamaica instrument facilitated further development of the money market during the 1986 - 1990 period.

The 388.3% and 103.8% increase in outstanding stock of Treasury Bills and Certificates of Deposit, respectively, reflected a faster growth in money market activities when compared to that of the bond market. In the relatively unstable macro economic environment, particularly after September 1988, the outstanding stock of Local Registered Stocks grew by 61%, when compared with the growth in Treasury Bills and Certificates of Deposit, showing a shift from medium term to short term borrowing by the government.

With respect to the provision of new loans, at the end of March 1986, there was a 28.4% decline in the value of loans provided by building societies compared with March 1985. However, between 1987 - 1990, the value of new mortgage loans increased by 269% having increased from J\$30.8 million at the end of March 1987 to \$113.7 million at the end of March 1990. During the same period, the Jamaican dollar depreciated by 22.2% and would have filtered into in the price of housing units. Therefore, the percentage increase in the number of new units could be lower than that reflected in value terms.

By 1990, the intensity of crowding out of private sector credit by the public sector declined, slowly. The intensity of private sector crowding out declined from 56% in 1985 to 49% in 1990, suggesting a 7% increase in available credit to the private sector.

Stock market activities declined up to March 1988, coincident with the increased competition from alternative investment instruments on the financial market. In addition, the stock market activities reflected similar experiences throughout the financial world, particularly following the historic and dramatic development on the New York Stock Exchange which occurred in October 19, 1987.

Despite the increased supply of government paper and Bank of Jamaica Certificates of Deposit on the financial market between 1989 and 1990 to control the escalating growth of money supply and to protect the exchange rate, stock market activities strengthened. The stock market performance was assisted by the existing high levels of liquidity in the economy, as well as the relatively high inflation rates. As a result the stock market index increased from 1777.96 at the end of March 1989 to 1904.43 points by March 1990.

1991 - 1995

This period was characterized by more efficient central government operations which resulted in the attainment of fiscal surpluses. The increase in domestic debt was mainly to assist in the control of money supply and the inflation rate which resulted from the intensification of the liberalization process in September 1991 and the unprecedented private capital inflows which occurred in FY 1994/1995.

During this period, there were significant developments in all facets of the financial market. In the money market, there was a 258% increase in the outstanding stock of Treasury Bills between March 1990 and March 1995. Money market developments were also assisted by the central bank's policy thrust which evolved during 1993 to play an active role in fostering the development of this market. In 1992 the central bank was issued with marketable government securities to cover prior year losses. These securities were mainly in the form of Local Registered Stock. It was thought that the development of a vibrant money market which traded in Government of Jamaica securities was essential in reducing the dependence of financial institutions on the Bank of Jamaica for day-to-day liquidity support. The Bank's holding of a large stock of marketable securities facilitated the development of this market.

Consistent with initiatives to develop the money market in general, Bank of Jamaica also actively encouraged development of secondary market trading. Consequently, in April 1994, seven primary dealers were appointed. These primary dealers were expected to be market makers, to provide underwriting support for new issues of Government of Jamaica and Bank of Jamaica securities as well as secondary market liquidity. These financial intermediaries were the media through which the central bank conducted daily liquidity management via reverse repurchase transactions. The Bank of Jamaica also widened the range of securities that could be used for repurchase transactions to include Local Registered Stocks and Equity Bonds and removed the limit to the number of repurchases which could

be granted to each financial institution per month. Repurchase agreements were transacted with the central bank as well as on an interbank basis.

By March 1994, open market operations were implemented through reverse repurchase agreements involving government Treasury Bills, Local Registered Stocks and to a lesser extent Bank of Jamaica's Certificates of Deposit which were fully phased out in March 1995.

By 1995, reverse repurchase agreements were the principal tool of open market operations which were utilized by the monetary authorities to further secure an economic foundation that would facilitate sustained growth in the medium term in a situation where foreign exchange inflows and the accumulation of Net International Reserves continued to exceed targeted levels. Outstanding reverse repurchase agreements grew from \$1.5 billion at the end of June 1994 to \$3.5 billion at the end of March 1995.

Investment opportunities on the money market were further broadened with the emergence of commercial paper market in 1992. This market emerged at the peak of high inflation and high interest rate in 1992. Fund raisers were able to obtain financing through the commercial paper market, an alternative to expensive commercial bank loans, an outcome of the restrictive monetary stance of the authorities. Latest available statistics showed that commercial paper activities grew from approximately 1.0 billion in June 1994 to approximately 4.0 billion in December 1994.

Activities on the bond market also broadened during this period, with the issue of new debt instruments by the government. In the early 1990's variable bonds were introduced to the financial market indicating a preference for longer term financing on the part of the government. The interest rate on this hybrid instrument was linked to that of Treasury Bills while offering a longer term investment option.

Relative stability in the economy enabled the Government of Jamaica to float a US\$20.0 million bearer bond in September 1993. This instrument was a domestic placement to facilitate the financing of developmental projects. This was primarily taken up by financial institutions.

In the capital market new mortgage loans increased in value from \$158.4 million at the end of March 1991 to \$648.6 million at the end of March 1995. This growth in the value of mortgage financing must, however, be viewed against a 78.6% depreciation in the local currency over the same period and an inflation rate of 21.2% as well as increases in nominal lending rates which would impact negatively on cost.

The stock market activities continued to record increased trading activities up to March 1993 although the stock of government and Bank of Jamaica instruments increased in the market.

The index grew rapidly from 2912.98 points in March 1991 to 7176.55 points in March 1992 and increased further to 27809.94 points in March 1993. This growth in the stock market was facilitated by a rapidly depreciating Jamaica dollar which accelerated inflation.

Although the nominal interest rates on the alternative investment instruments were attractive, real returns were either low or negative. Investors therefore showed a preference for high risk investments due to expectations of an inflationary economic environment.

With further tightening of the economy in 1993/94, there was a demonstrable decline in stock market activities reflected in the movement in the index from 27809.94 points at the end March 1993 to 14738.04 points at the end of March 1994. In addition, increased demand for financing by the government through the issue of debt instruments led to increased lending rates. Inflation rates were also declining, providing investors with greater real returns on less risky investments, such as to be found in the commercial paper market. Real returns on these instruments were purportedly higher than that offered by the commercial banks while providing borrowers with a relatively cheaper source of funds.

The stock market activities, however, rebounded in 1994 - 1995 as reflected in the increase in the index from 14738.04 points in March 1994 to 19537.69 in March 1995. This was facilitated by an improved economic environment, reflected in the declining inflation rate and the relatively stable exchange rate. Interest rates declined in spite of the increased supply of government instruments

on the local financial market to assist in the control of money supply growth resulting from the faster than programmed accumulation of Net International Reserves.

In addition to the relatively stable macroeconomic environment, the introduction of the Securities Act in December 1993, and the establishment of a Securities Commission in 1994 to supervise and regulate the capital and money market, encouraged confidence in the stock exchange. The fact that open market operations were now being implemented by the central bank through reverse repurchases and repurchase agreements which did not require incremental issues of securities encouraged the perception of future economic stability. The repurchase agreement provided short term financing to financial institutions in addition to the encouragement of inter-bank borrowing thereby eliminating some of the competition in the market.

SECTION IV
CONCLUSIONS AND PROSPECTS

In the pre 1985 period, the domestic debt grew in response to government financing requirements. The government also utilized central bank loans which led to money creation. The range of investment instruments on the financial market was narrow. Increased domestic debt, therefore, facilitated higher volumes of investment in short term and medium to long term instruments. During this period, stock market activities strengthened.

From 1985 onwards domestic debt grew to finance fiscal deficits as well as to facilitate the attainment of the financial reform programme objectives. These objectives were to:

- separate monetary and fiscal policy;
- eliminate distortions in the financial market;
- create a fiscal and institutional environment which would strengthen the money and financial markets.

With the implementation of financial reform, interest rates on government paper were market determined which meant that the costs of government borrowing reflected market rates. Further, the government had to compete with other entities to access credit. New instruments were also introduced by the Central Bank, widening the range of instruments available in the financial market. During 1986 - 1990, there was a sharper growth in money market activities when compared to the bond market. In value terms, capital market investment increased but the depreciation of the exchange rate suggest a decline in terms of volume.

Stock market activities strengthened between 1980 - March 1988 but declined subsequently due to increased competition from government and Bank of Jamaica instruments, and more significantly, the dramatic fall-out on the New York Stock Exchange.

The post 1988 period saw increasing government debt to assist the central bank with the absorption of liquidity stemming from unspent reinsurance flows in a situation where the Jamaican currency was depreciating. This persistent instability in the foreign exchange market was exacerbated by the intensification of financial

liberalization in September 1991. As a result, the inflation rate increased and peaked in March 1992 at 105.73% resulting in negative returns on banking instruments. Stock market trading, therefore, boomed during this period reflecting expectations regarding the economic environment.

By 1993 further signs of the broadening of the bond market was evidenced with the successful introduction of hybrid variable rate bonds and the floating of a US\$ bond by the government of Jamaica. However, with the growth in the commercial paper market and an improvement in the economic environment, by March 1994 trading on the stock market started to fall. The supply of government securities on the market increased dramatically between 1994 - 1995 reflecting attempts on the part of the authorities to control the money supply growth which emanated from the rapid growth in the Net International Reserves. Through the reissuing of its holdings of government securities the central bank was able to implement open market operations more effectively. In this relatively stable economic environment stock market activities strengthened.

In summary the expansion in the government's domestic debt impacted positively on the development of financial markets as follows:

- improved the allocation of financial resources through the market mechanism;
- increase in the range of financial instruments in the financial market;
- facilitated the development of secondary trading in government paper;
- increase in the number of institutions in the financial market;
- facilitate more efficient liquidity management by the central bank;

The stock market, in particular, strengthened when:

- narrow range of instruments in the capital market;
- economic imbalances which caused expansion in money supply and increased inflation;

- . political stability;
- . relaxed monetary stance;
- . introduction of Securities Act in December 1993;
- . establishment of Securities Commission in 1994.

However, the increasing government domestic debt may have stifled developments in the capital market, where new loans are mobilized for long term investment. Data suggests that in periods of high domestic debt growth, particularly to assist in the implementing of monetary policy since 1988, the broadening in this market may have been hindered. Developments in this market could have been hindered due to:

- periods of macroeconomic instability since 1988 due to high levels of liquidity, exchange rate instability and high inflation rates. The resulting restrictive monetary stance of the authorities to correct these imbalances usually led to high nominal interest rates which impacted on overall lending rates which could have impacted negatively on the accessing of new loans for construction or mortgages to name a few.
- Continued high use of domestic credit by the public sector. Despite the reduction in the intensity of private sector crowding out from 56% in 1985 to 49% in 1995, this level of usage of domestic credit by the public sector is still too high.

In terms of stock exchange developments when macroeconomic stability was attained and the perception of low inflation existed, trading activities were tempered.

For the future, financial markets are expected to continue to assist in the allocation of investable funds. The continued development of the financial market especially its expansion within the region should be encouraged to provide long-term economic development.

The attainment of a low inflation rate as well as the maintenance of a stable exchange rate should bring about further economic stability and confidence in the Jamaican economy, two critical elements for economic growth and development, which would further enhance financial market development.

Confidence in the political and social stability are also important prerequisites to mobilize savings and foster an effective and active market.

In addition, the maintenance of prudent fiscal management which facilitates the generation of public sector savings will further encourage the continued development of the financial market.

Finally the attainment of the correct mix of economic policies to attain macroeconomic and social stability in the long run, would provide a more level playing field for all the participants to compete in the financial market.

TABLE I
WEIGHTED AVERAGE RATES (PERCENT)

End of Period	Certificates Of Deposits	Treasury Bills	Overall Average of Commercial Banks Lending Rate
1979/1980	-	9.98	15.3
1980/1981	-	9.99	16.3
1981/1982	-	9.28	16.4
1982/1983	-	12.3	16.9
1983/1984	-	13.1	18.0
1984/1985	-	17.1	21.2
1985/1986	27.9	23.7	29.5
1986/1987	18.0	16.9	24.4
1987/1988	18.4	19.7	25.4
1988/1989	17.4	17.8	24.4
1989/1990	28.3	25.4	29.2
1990/1991	30.6	28.5	32.5
1991/1992	50.0	44.3	43.9
1992/1993	21.5	19.5	40.4
1993/1994	49.9	39.9	51.5
1994/1995	-	20.6	43.5

TABLE II
GROSS DOMESTIC DEBT
AND FISCAL POSITION

J\$ MILLION

End of Period	Local Registered Stock	Treasury Bills	Total Nominal Stock	Fiscal Surplus/ (Deficit)
1979/1980	1480.9	300.0	1780.9	(702.4)
1980/1981	1989.0	380.0	2369.0	(1016.3)
1981/1982	2638.8	471.0	3109.8	(875.9)
1982/1983	3410.6	490.0	3900.6	(864.9)
1893/1984	3704.3	491.0	4195.3	(951.3)
1984/1985	4708.2	683.0	5391.2	(786.2)
1985/1986	5202.5	866.1	6068.6	(331.6)
1986/1987	5123.8	999.0	6122.8	(294.1)
1987/1988	6732.9	1705.0	8437.9	336.6
1988/1989	6235.1	3294.0	9529.1	(705.7)
1989/1990	7584.4	3335.0	10919.4	654.9
1990/1991	5931.0	3500.0	9431.0	2377.1
1991/1992	6032.7	3644.1	9676.8	1123.3
1992/1993	11931.3	6470.0	18401.3	3174.8
1993/1994	16056.0	7491.0	23547.0	3617.2
1994/1995	31987.5	11962.0	43949.5	4909.2

TABLE III

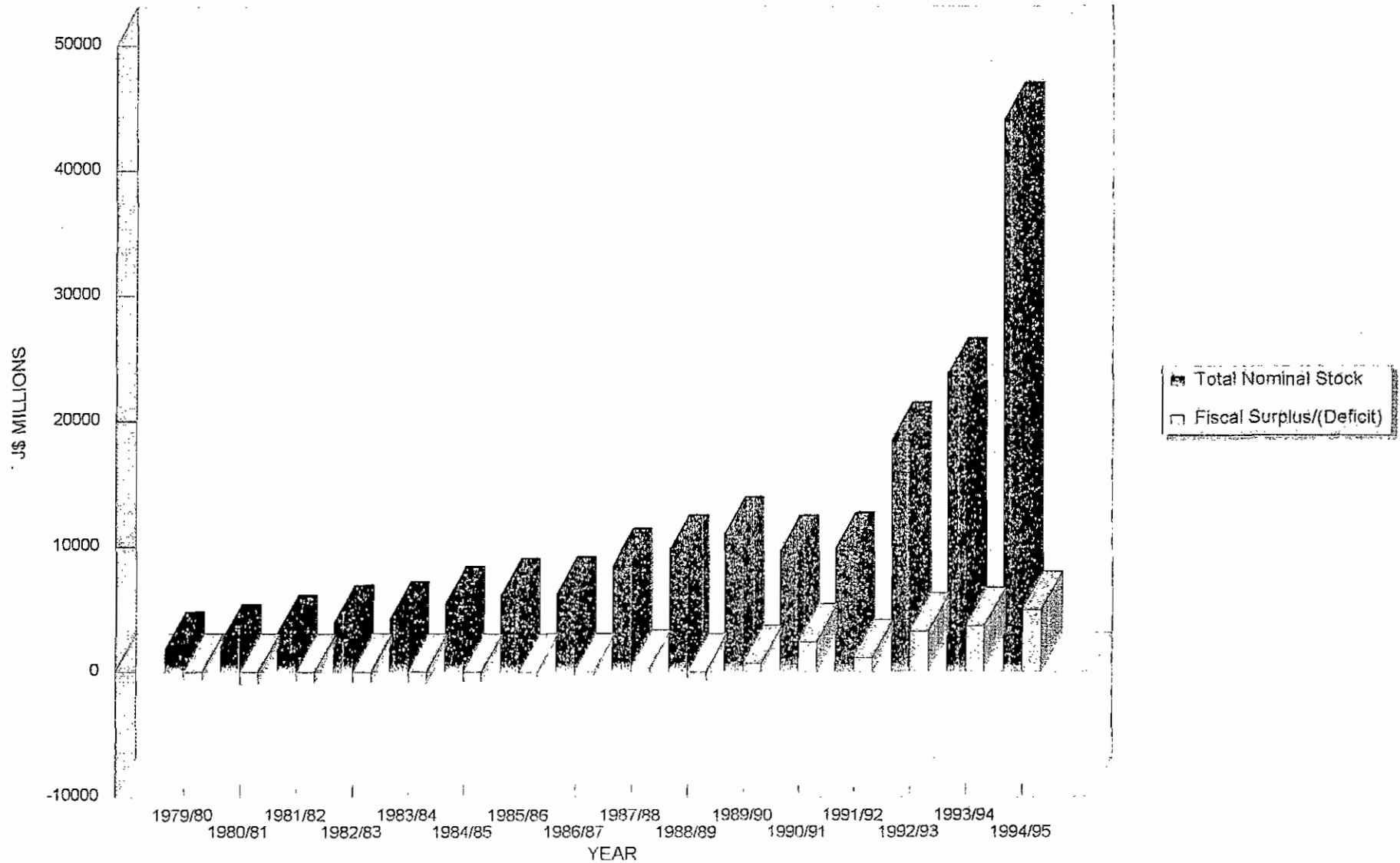
GROSS DOMESTIC DEBT

AND FISCAL POSITION

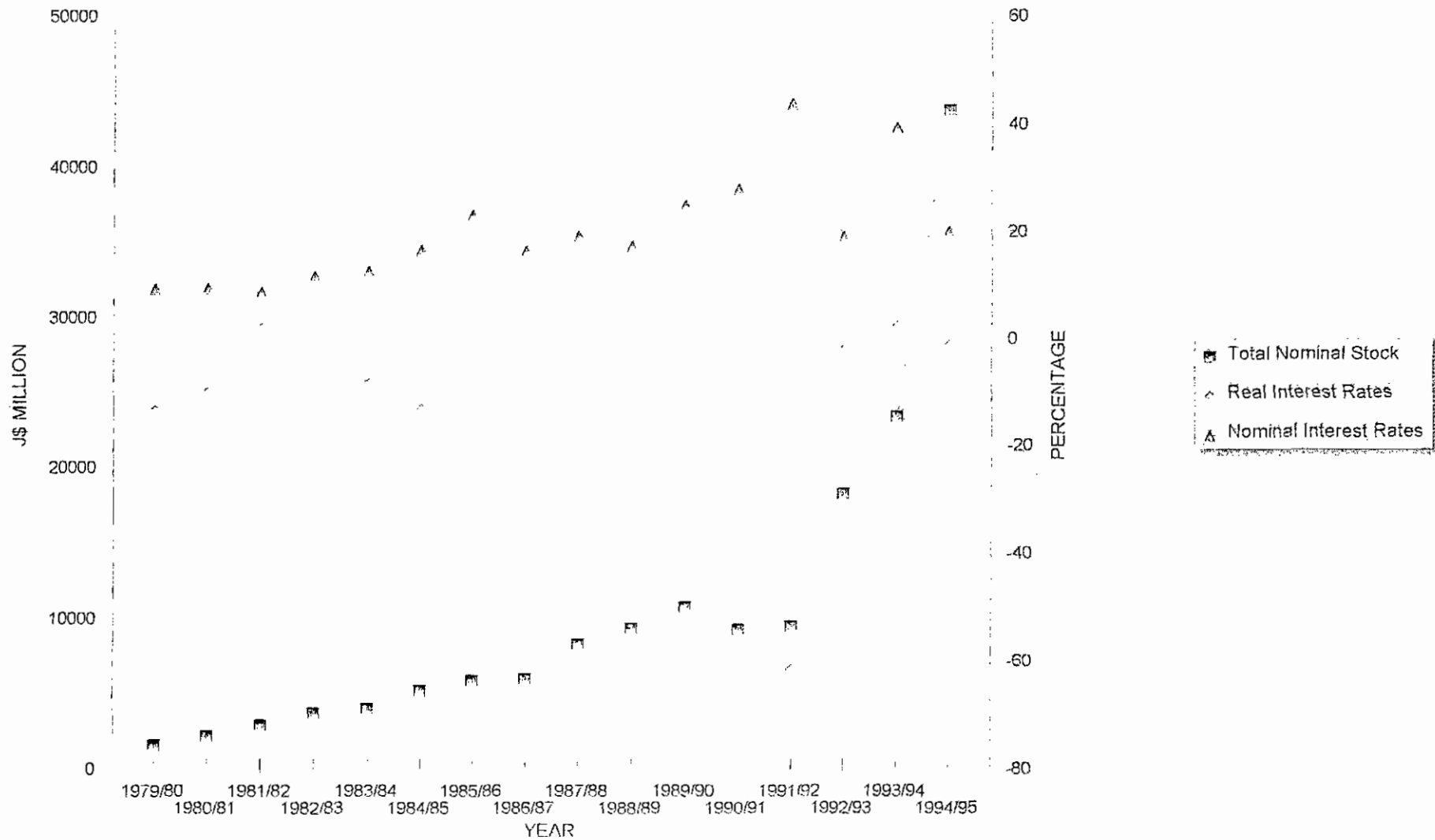
AS % OF GROSS DOMESTIC PRODUCT

End of Period	Local Registered Stock	Treasury Bills	Total Nominal Stock	Fiscal Surplus/ (Deficit)
1979/1980	N/A	N/A	N/A	N/A
1980/1981	N/A	N/A	N/A	N/A
1981/1982	N/A	N/A	N/A	N/A
1982/1983	N/A	N/A	N/A	N/A
1983/1984	N/A	N/A	N/A	17.7
1984/1985	49.0	7.2	56.2	7.2
1985/1986	42.0	7.0	49.0	5.7
1986/1987	33.0	6.5	39.5	1.9
1987/1988	38.7	10.0	48.7	2.1
1988/1989	32.0	16.9	48.9	3.6
1989/1990	31.0	13.7	44.7	2.7
1990/1991	18.0	10.6	28.6	7.2
1991/1992	12.1	7.3	19.4	2.3
1992/1993	15.3	8.3	23.6	4.1
1993/1994	14.9	7.0	21.9	3.4
1994/1995	23.5	8.8	32.3	3.6

GROSS DOMESTIC DEBT & FISCAL POSITION



DOMESTIC DEBT & INTEREST RATES



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