CURRENT FISCAL ENVIRONMENT

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INTRODUCTION

Present fiscal environment is the product of recent trends and government strategy, policy and behaviour of the government with regard to taxes, public expenditure, borrowings and related variables. Chapter 1 briefly described fiscal environment as a part of domestic macroeconomic environment. Chapter 12 shows how fiscal policy works and provides theoretical foundations and framework for understanding a practical fiscal situation. Chapter 15 provided a brief look into fiscal strategy and reforms in the country. This chapter is devoted to the understanding of the configuration of the current fiscal situation and the dynamic forces underlying it. Budget is the most important single index of the fiscal environment and must be carefully studied to understand the underlying factors and forces.

Fiscal environment affects business basically in the following ways:

- Changes in taxes affect costs, prices, demand and profitability.
- The quantum, composition and direction of public expenditure affect costs, supply capabilities and competitiveness.
- Changes in public borrowings affect market liquidity and cost and availability of funds.
- The method of deficit financing affects money supply and inflation rate, which, in subsequent rounds, affects industrial costs, demand and exchange rates.

TAXATION ENVIRONMENT

OVERALL STRUCTURE AND TRENDS

Trends in direct and indirect taxes were briefly dealt with in Chapter 15. In fact, over the reform years, a structural shift is discernable in the field of taxation. Over the decade 1991-2001, the following interesting changes have taken place:

- Share of direct taxes in gross tax receipts of the central government almost doubled from about 19 per cent to over 37 per cent while that of indirect taxes fell from about 78 per cent to nearly 62 per cent.
- Following the above trend, the share of personal income tax rose from 9.3 per cent to 17.9 per cent and that of corporate income tax from 9.3 per cent to 19.5 per cent.
- The share of custom duties in gross tax revenue fell from about 36 per cent to 24 per cent due largely to sustained fall in tariff rates in the wake of trade liberalisation measures.
- The share of excise duty fell from about 43 per cent to 36 per cent due largely to lowering of rates and extension of input credit system under MODVAT/CENVAT.
- On the whole, tax revenue, as a proportion of GDP, declined marginally from 10.1 per cent to 9.9 per cent. Within this proportion, the proportion of direct taxes rose from 1.9 per cent to 3.3 per cent but that of indirect taxes declined from 7.9 per cent to 6.1 per cent during the period.

Service tax, which is of relatively recent origin, is still abysmally low in relation to the contribution of the sector to GDP. At present, the sector accounts for about one-half of the country's GDP but service tax as proportion of GDP stands at merely 0.4 per cent as compared to 36 per cent for excise. Nevertheless, the service tax proportion has nearly quadrupled over the years 1994-2002. In 2001-02 service tax was abysmally low at 5 per cent on turnover without input tax credit. Though service tax has been in operation for a number of years, it was mentioned neither in the central nor in the concurrent list. In 2001-02, forty one specified services were subject to service tax. There is, however, tremendous scope for extension in the coverage of service tax, which is desirable for broad basing the taxation structure. In 2001-02, service tax collections were only Rs. 3600 crore, accounting for merely 0.41 per cent of service sector output, which is estimated at about Rs. 10,00,000 crore. If we were able to tax even 25 per cent of this output at 10 per cent rate, the service tax collection would be at least Rs. 25,000 crore. This is the potential of service tax.

Tax Adequacy

Tax adequacy is one of the canons of taxation. The adequacy is generally judged in relation to the expenditure requirements of the government. The expenditure requirements, as will be seen in subsequent sections, basically depend upon the growth of the economy, prior expenditure commitments and the overall role of the government in the economy. Keeping in view these requirements, targets for different categories of tax revenue are fixed and the adequacy of tax revenue is judged vis-à-vis such targets. Shortfalls, if any, are covered by fresh borrowings or creating new money (assuming that the targets for non-tax receipts are exactly achieved).

Tax revenue generation has generally been below target due mainly to poor tax administration, tax evasion and hence poor compliance rates. Quite often, revenue shortfalls are also the result of economic slowdown characterised by falling growth rate of output and income. Falling rate of output growth results in lower excise and service tax collection and falling growth rate of income correspondingly slows down income tax realisation and even to lower excise collection via fall in demand and hence output. In 2000-01, actual tax receipts of the centre (net of states' share) fell short of the target by Rs. 9210 crore. Often, government attempts to minimize the revenue shortfalls so that the borrowing levels remain under control.

Revenue shortfalls give an important message to the business manager. Large and rising shortfalls can be the foreshadow of a larger tax dose, an increase in the coverage of taxation or stringent measures for improving tax compliance in near future. Business plans may have to be adjusted accordingly or kept flexible enough to accommodate such possible changes. Revenue shortfalls may also indicate possible austerity measures on the expenditure side. New infrastructure plans may be postponed, subsides may be reduced or public sector prices may be increased to contribute more to the exchequer. In such cases, business costs may rise. The impact would, of course, be different for different industry segments depending upon the direction of public policy measures.

DIRECT TAXES

In the recent years direct taxation measures have been guided by the considerations of tax rate stability, widening of the tax base, rationalisation and simplification of the tax structure and

improved tax compliance. Among the major factors affecting the tax environment, the following direct tax measures have been taken in recent years:

- Tax incentives in the form of tax holdings for infrastructure projects including highways, water supply, irrigation, sanitation, solid waste management systems, ports, industrial parks and generation and distribution of power.
- Full tax exemption on income derived from infrastructures.
- Extension of the one-by-six scheme for identifying potential taxpayers to all urban areas in the country.
- Tax concessions for enterprises for developing special economic zones.
- Tax incentives for research and development particularly in the areas of biotechnology, drugs, and pharmaceuticals and scientific research in government- approved research programmes.
- Removal of tax exemption on interest payable on external commercial borrowings contracted after June 1, 2001.
- Enhancement of the scope of concessional rate of tax on income from Global Depository Receipts (GDRs).
- A variety of tax incentives for investment in financial assets and venture capital funds and companies.
- Taxation of perquisites on the basis of cost to the employer.
- Tax incentives for non-profit and social sector organisations.
- Extension of tax benefits available to LIC and GIC to private insurable companies as well to create a level playing field.
- Tax deduction at source on income from lotteries and game shows.
- Compulsory filing of income return for companies even in case of losses.
- Adoption of one-by-six scheme to identify potential taxpayers and widen tax base.
- Special provisions to check profit shifting by multinational enterprises through transfer pricing.

RECOMMENDATIONS OF THE TENTH PLAN ADVISORY GROUP

The Advisory Group on Tax Policy and Tax Administration for the Tenth Plan (The group was constituted by the Planning Commission in July 2000 and submitted its Report in May 2001) has suggested the following measures for improving direct taxation:

- Retention of the maximum rate of personal income tax at 30 per cent and correction for the removal of bracket creep from the structure by broadening the various brackets and slabs even though it may cause some revenue loss to the government.
- Phased elimination of tax incentives under Section 80CCC, 88, 80L and 10(15) of the Income Tax Act.

- Tax concessions under Section 80D, 80DD, 80DDB and 80E be provided by way of tax credits rather than deduction from income so as to make the system more equitable.
- Removal of the rollover provision relating to capital gains so as to enable further reduction
 n the tax rate structure.
- A ceiling for corporate tax rate not exceeding the maximum marginal rate of income tax.
- Abolition of the distribution tax on dividends so that the tax rate for the foreign companies could be the same as that for domestic companies.
- Reconstitution of the Minimum Alternative Tax (MAT) and it should equal 0.75 per cent of
 adjusted net worth plus 10 per cent of the dividend distributed. The MAT may be carried
 forward for set off against future tax liability in excess of MAT (as provided in Section
 115JAA).

On the basis of per capita income, India is classified among the low-income economies but its direct tax rates continue to be among the highest in the world. The high rate of taxation is not only in case of personal income tax and corporation taxes but also for capital gains. In India short-term capital gains are taxed at the marginal rate of 31.5 per cent (for the individual in the highest tax bracket) as compared to 26 per cent in Japan and France. In Germany, personal capital gains are tax exempt if the gain is from shares held for more than 6 months. In fact, India is second only to the US in the world where the short-term capital gains tax is 39.6 per cent and long-term tax 20 per cent. In a number of emerging market economies like Hong Kong, Singapore, Malaysia, China and Mexico, there is no capital gains tax on shares for their residents so that domestic investment is encouraged. Box 16.1 gives the main reasons for this trend.

BOX 16.1

Why are a number of countries the world over are tending to lower the rates of capital gains tax?

There has been a widespread tendency, both in the developed world and emerging market economies, to reduce the rates of capital gains tax both on short and long-term assets, particularly of financial nature. The main reasons are the following:

- Capital gains are generally calculated on the basis of appreciation in the value of the assets over the
 holding period and fall in the value of money due to inflation is not taken into account. It is
 possible that capital gain is entirely neutralised by inflation.
- It involves a bunching problem. A capital gain is taxable at the time of sale and the entire income
 is counted in the year of sale whereas it accrues over a period of time for which the asset is held. It
 may involve higher tax liability if the tax system is progressive.
- Capital gains tax kills incentives to save and invest.

KELKAR COMMITTEE RECOMMENDATIONS

The Kelkar Committee on Tax Reforms (Chairman: Dr. Vijay Kelkar) in its far-reaching recommendations has suggested a number of measures to reform the country's direct tax system.

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- Introduction of only two income slabs taxable at 20 per cent (for taxable income between Rs. 1 lakh Rs. 4 lakh) and 30 per cent (for taxable income above Rs. 4 lakh) with exemption limit of Rs. 1 lakh and no rebate on savings for personal income tax.
- Scrapping of all exemptions (except for the handicapped) making an end to the 'exemption raj' which causes revenue leakages, unaccountability and lack of transparency.
- Taxation of agricultural incomes to prevent laundering of non-agricultural income which at present is estimated to cause a tax loss of Rs. 1000 crore to the government.
- Exemption of long-term capital gains and abolition of dividend tax;
- Phasing out of tax benefits for housing loans.
- Reduction in corporate income tax from 36.75 per cent to 30 per cent for domestic companies and from the 40 per cent to 35 per cent for foreign companies.
- Establishment of a Tax Information Network (TIN) to assess tax deduced at source (TDS)
 of all taxpayers, process advance tax and refunds. The network can be used by banks for
 receiving payments online, instant accounting of tax collections and digitising tax returns.

The committee recommended that the measures be implemented in one go for effective results. Recommendations concerning agricultural income tax require enabling resolutions by the state governments under Section 252 of the Constitution of India to authorise the central government to impose the tax, which could be assigned back to the states. The committee felt that the tax could generate revenue from the top 5 per cent layer without affecting the 95 per cent of the genuine farmers. Implementation of the measures recommended by the committee further requires amendment to the Income Tax Act, which can be a long-drawn process.

INDIRECT TAXES

It is interesting to note that indirect tax revenue as a proportion of GDP traces a U-shaped curve (see Figure 14.1) over the reform years. The share, which was 7.9 per cent in 1990-91, consistently fell to 5.5 per cent in the year 1998-99 and then rose to 6.1 per cent in 2001-02 (BE). However, the share of indirect tax revenue, as already pointed out, fell almost consistently from about 78 per cent to 62 per cent during the period. In absolute terms, indirect tax revenue rose from about Rs. 45,000 crore to Rs. 1,40,000 crore.

The near-stagnation or marginal fall in the indirect tax/GDP ratio is basically attributed to the following factors:

- Consistent fall in the average excise duty rate and gradual switchover to value added tax (Box 16.2).
- Consistent fall in the custom duty rates in the wake of trade liberalization.
- Rising share of the services sector in which tax coverage is narrow and rate of service tax is
- Increasing incidence of output evasion
- Faster growth of small scale sector (enjoying many tax concessions and incentives) vis-à-vis

other sectors of the economy. During 1996-2001 annual growth rates in the Index of Industrial Production at constant (1993-94) prices were in the range of 4-7 per cent as compared to the range of 7.5-11.5 per cent for the small scale industry over the period.

Weaknesses in tax administration resulting in poor compliance.

BOX 16.2

The Logic of Value-added Tax (VAT)

The tax when applied over a wide product base is expected to remove tax constraints on industrial growth and fall light on the consumer's pocket. Today, the country's manufacturing sector is suffering from low level of competitiveness. Its share in GDP is about 25 per cent which is among the lowest in the developing countries. With the growth of the services sector, it is likely to fall further. VAT is expected to:

- Simplify and rationalise the indirect tax structure;
- Lower the incidence of indirect taxes and stimulate demand and consumption;
- Impart greater competitiveness to industry;
- Reduce administrative and tax collection costs;
- Improve tax compliance;
- Promote homogeneous product classification and also bring greater homogeneity in tax laws; and
- Bring uniformity in the rate structures and broadbase the indirect tax system.

More than 125 countries of the world have successfully implemented VAT. The countries cover about 70 per cent of the world population and derive about 27 per cent of the total tax revenue from this source of tax (also see **Box 12.1**).

Source: Prepared from CII (2000), Implementation of Value-added Tax in Northern Region States: A Note CII, (October).

The indirect tax/GDP ratio might fall in future as MODVAT/CENVAT extends to more products and gains coverage at the state level as well. Much, however, will continue to depend on the efficiency and efficacy of tax administration.

The major developments in the area of indirect taxation in the recent years have been as follows:

Custom Duties

The incidence of these duties, on the average, has gone down with WTO-induced trade liberalisation:

- Continuance of the four ad valorem rates of 5 per cent, 15 per cent, 25 per cent and 35 per cent (35 per cent being the peak rate of custom duty);
- Simplification and rationalisation of the custom tariff structure at various levels;
- Steep rise in the basic customs duty for tea, coconut and crude and refined edible oils to protect the domestic sector;

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- Concessional custom tariff rates for specified IT and telecom products and equipment including basic telephone, cellular phone, radio paging, digital video cameras and equipment for internet services; and
- Reduction in custom duty on writing instruments and parts, cinematographic cameras and
 equipments, specified textile machinery, silk and cotton waste, flax fibre, cement and clinkers,
 soda ash, gemstones, gold, LPG conversion kits and pollution control equipment.

Excise Duty

- Rationalisation and simplification of the rate structure by adopting a single rate of CENVAT (with few exceptions);
- Preparations based on fruits and vegetables exempted to stimulate the growth of food processing industry;
- A large number of products brought under CENVAT;
- Increase in the duty of petrol to 90 per cent and on high-speed diesel to 20 per cent (as on eb. 12, 2002);
- Reduction in duty on woollen fabrics;
- Extension of MRP (maximum retail price) based assessment of excise duty to filters, strainers and thinners; and
- Four per cent excise duty (without CENVAT credit) on a number of consumer products including imitation jewellery, toothbrushes, powered goggles, glass tables and kitchenware, watches and clocks and black and white TV sets.

Recommendations of the Tenth Plan Advisory Group

The Advisory Group on Tax Policy and Tax Administration for the Tenth Plan has given the following suggestions in the area of indirect taxes:

- A two-tier structure for excise duty with 16 per cent and a higher rate;
- Expansion of the definition of 'manufacture' to include the entire pre-marketing chain of value addition to be charged to excise duty;
- Inclusion of capital goods with other inputs used by the manufacturer for the purpose of calculating input tax credit under CENVAT;
- Concessional excise duty of 85-90 per cent of the normal rate for the SSI Units opting for the CENVAT system;
- Extension in the coverage of CENVAT to include services as well;
- Adoption of a comprehensive VAT system by the states;
- Reduction in the median rate of tariff from 3-5 per cent to 25 per cent in 2002-03 to 20 per cent in 2003-04 and to 15 per cent in 2004-05;

- Minimisation of custom duty exemption and adoption of a uniform rate of countervailing duty at 16 per cent without exemptions;
- Rationalisation and integration of a large number of export promotion schemes.

The above proposals can be taken as a precursor to future changes in the taxation environment. Not only at the level of the central government, the value added tax system which is a component of taxation environment appears almost certain to extend both geographically and in terms of product coverage. VAT will eventually replace the retail sales tax system. With this, a uniform common market with little inter-state tax differences will prevail in the country contributing to the conditions of fair competition between domestic firms.

KELKAR COMMITTEE RECOMMENDATIONS

Kelkar Committee on Tax Reforms in its consultative paper submitted to the Ministry of Finance in October 2002 made many radical suggestions for further tax reforms. These measures may be the pointers to future changes in the tax environment in the country. Some of the major recommendations of the committee are the following.

- Shift to a two-slab custom duty structure at the rate of 20 per cent on finished goods and 10 per cent on raw materials (except life saving drugs and imports of strategic importance to the country) by 2004-05;
- Application of CENVAT at the rate of 16 per cent for all non-food, 8 per cent on food products (life saving drugs and security-related products being exempted);
- Extension of public utilities from service tax;
- Implementation of VAT by the states by April 2003 as already decided;
- Drastic reduction in the multiplicity of tax rate structures;
- Simple custom tariff structure consisting of only three elements, viz. basic custom duty,
 countervailing duty and anti-dumping or safeguard duty;
- Excise duty waiver only to SSI Units with annual turnover up to Rs. 50 lakh. The units with higher turnover should pay 4 per cent excise on turnover exceeding Rs. 50 lakh. In October 2002, the limit of exemption was Rs. one crore per annum;
- Custom tariff rate of 150 per cent on selected farm products (to protect farmers) and demerit goods;
- Phased withdrawal of special additional duty of 8 per cent and 16 per cent over and above the 16 per cent CENVAT;
- Avoiding increase in import tariff on any item except those enjoying zero tariff. In such case, import tariff may be imposed only up to 5 per cent;

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- Basic custom duty of 10 per cent for crude oil and 15 per cent for its products during 2003-04:
- Simplification of tax procedures to promote tax coverage and improve tax compliance;
 and
- Tax relief to export-oriented units and units in the special Economic Zones (SEZs) for all
 products.

Like direct tax proposals, the committee recommended that the measures be implemented in toto for effective implementation.

FISCAL DEFICIT AND ITS MANAGEMENT

ALTERNATIVE DEFICIT CONCEPTS

Fiscal deficit is one of the key parameters of public finance management of a government. It refers to the excess of total expenditure (including revenue expenditure and capital expenditure) over the revenue receipts of a government and indicates its borrowing requirements, which are classified as capital receipts. A related concept is the primary deficit, which is defined as fiscal deficit net of interest payments. It indicates the current fiscal stance of the government. Revenue performance of the government is sometimes judged on the basis of revenue deficit, which is the excess of revenue expenditure over revenue receipts, though it is of relatively limited utility. These budgetary concepts are summarised in Box 16.3.

The relative significance of the alternative concepts must be clearly understood. Fiscal deficit concept lies at the core of the various parameters of the fiscal performance of a government and fiscally responsible governments often set deficit targets to keep fiscal position under control. Fiscal deficit points to the total borrowing requirements of the government whereas revenue deficit tells that the government is unable to meet its day to day running expenses from the normal and regular sources of tax and non-tax revenue. For a particular level of fiscal deficit, a rising level of revenue deficit indicates that a larger part of the government borrowings are used for meeting day-to-day routine expenditure of the government and reflects a fiscally undesirable situation. It is just like a household borrowing to meet its food expenditure. Falling revenue deficit for a particular level of fiscal deficit indicates that the borrowers funds are being used for asset creation and reflects a healthy fiscal trend. Large and rising interest payments increase fiscal deficit and lower primary deficit, as defined in Table 16.1. A falling primary deficit, therefore, shows that new borrowing is being used to meet old debt liabilities. It is a serious situation as it signifies movement towards debt trap. A debt trap, broadly speaking, is a situation in which the government has to raise fresh loans to pay off its past loans. In this process, it keeps on changing its creditors while its debt liability remains as before, or even increases.

BOX 16.3

Essential Budgetary Concepts for Understanding the Fiscal Environment (Central Government Budget)

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Description

A. REVENUE

1. Net Tax revenue:

Defined as the tax revenue of the union government from income tax, custom duties, excise duty and other central taxes minus the amount statutorily shared with

the states.

2. Non-tax revenue:

Consists of interest earned by the government on loans given to states, union territories or public sector units, dividend payments received from public enterprises and earnings from the various administrative services provided.

3. Revenue receipts:

(1) + (2) above.

4. Capital receipts:

Consists of recovery of loans, receipts from public sector disinvestments, government borrowings and other liabilities incurred by the government.

5. Total receipts:

(3) + (4) above.

B. EXPENDITURE

6. Revenue expenditure:

It is generally non-asset-creating and is incurred mostly

for activities in the day-to-day running of the government. Mainly consists of general administration, defence, police, subsidies and interest payments (most of the items are also

included in 'non-plan' expenditure).

7. Capital expenditure:

It is asset-creating expenditure causing capital formation. It builds up social and economic capital to be used in future.

(6) + (7)

8. Total Expenditure:

C. ALTERNATIVE DEFICIT CONCEPTS

9. Revenue Deficit:

(6)-(3) above. It tells to what extent, the running expenses of the government exceed the regular sources of revenue.

10. Fiscal Deficit:

(8)-(3) above. It is the most widely used indicator of fiscal performance of a government. It reflects the total borrowing

requirements of the government.

11. Primary Deficit:

(10) minus interest payments of the government. It indicates how much borrowings are required to service past debts. A low value of the deficit indicates that new borrowings are used to service past debts.

DEFICIT TRENDS

Table 16.1 gives the position regarding comparative fiscal parameters of the central government from where an idea can be obtained about the fiscal health of the economy. Since 1993-94, revenue deficit as per cent of GDP has remained within the band of 2.5-4.0 per cent and since 1997-98 in excess of 3 per cent. Fiscal deficit since 1997-98 has remained above 5 per cent and continues to be the perpetual headache of the government. The problem assumes gigantic proportions for the government if the deficit of the state governments is also added.

According to Global Competitiveness Report 2001-2002, prepared jointly by the Centre for International Development and World Economic Forum, in the year 2000, India stood at 71st position out of total 75 countries ranked on the basis of general government fiscal surplus/deficit position. This speaks volumes of the quality of India's fiscal environment.

The primary deficit shows an alarming situation. As pointed out earlier, a high fiscal deficit and a falling primary deficit is a serious warning signal of a debt trap. Since 1992-93, except the year 1993-94, primary deficit as a proportion of GDP has been less than one per cent while fiscal deficit has varied in the range 4.0-6.5 per cent. The years 1995-96 and 1996-97 represented explosive fiscal situation. In the year 1995-96 borrowing requirements as reflected by the fiscal deficit equalled interest payments by the government. In 1996-97, interest liabilities exceeded fiscal deficit causing primary deficit to turn negative.

Table 16.1: Alternative Deficit Parameters of the Central Government Since (1992-93)

(as % of GDP)

Year	Revenue Deficit	Primary Deficit	Fiscal deficit
1992-93	2.5	0.6	4.8
1993-94	3.8	2.2	6.4
1994-95	3.1	0.4	4.7
1995-96	2.5	0.0	4.2
1996-97	2.4	-0.2	4.1
1997-98	3.1	0.5	4.8
1998-99	3.8	0.7	5.1
1999-2000	3.5	0.7	5.4
2000-01	3.9	0.8	5.5
2001-02(BE)	3.4	0.2	5.1

Source: Govt. of India, Economic Survey, 2001-02, Table 2.1

During 1997-2001, primary deficit remained within the range 0.5-0.8 per cent but had a steep fall in 2001-02 (BE) showing rapid movement towards debt trap. Fiscal management is a major challenge before the government for 2002-03 and subsequent years.

CHALLENGES OF DEFICIT MANAGEMENT

In the present state of economy, business environment characterised by low per capita income huge informal sector, highly inefficient bureaucratic machinery, low level of human development

index and declining role of the government in economic field, the task of fiscal management is full of challenges and fairly difficult. Under the process of economic reforms, the economy is in a state of transition and business environment is fraught with uncertainty. Almost every year, the government faces revenue short falls and the fiscal deficit targets are being missed. The summary of the major challenges of deficit management in the present scenario are as follows:

- The overall structure of taxation is being lowered through rationalisation while matching expansion of tax base is not compensating the same.
- The revenue buoyancy with respect to GDP is low.
- The efficiency of tax administration is low so that the cost of tax collection is relatively high and compliance rates are low.
- A predominantly large part of the economy is in the informal sector most parts of which are 'out of the tax net.
- The government relies heavily on fiscal incentives to spur growth.
- The GDP structure is changing in favour of services, which are either subject to low rate of tax or are outside the tax net.
- The contractual component of revenue expenditure (like interest payment, salaries and pensions) is high and rising and hence uncontrollable.

Some of the challenges are formidable and would require considerable time and preparation before these are met. However, bold and immediate initiatives are required to widen the tax base and boost the efficiency of tax administration. Further, there is a strong need to lower the structure of subsidies and increase user charges for various public utilities that may reflect economic costs.

PUBLIC BORROWINGS IN THE FISCAL ENVIRONMENT

IS THE GOVERNMENT HEADING TOWARDS A DEBT TRAP?

Since the year 1997-98, the rise of public borrowing (including other liabilities) has almost exactly equalled the size of fiscal deficit. The debt problem of the country, including both internal and external liabilities, has been simmering and the situation at present has almost reached a crisis level. Borrowings rose at a rapid rate during 1996-99 and slowed down thereafter. However, during the five-year period from 1996-97 to 2001-02, outstanding debt has almost doubled (Table 16.2). Similarly, interest payments have nearly doubled over the period. Average rate of interest paid on outstanding debt has remained remarkably stable around 8.5 per cent due to the contractual nature of the debt. Here it must be remarked that in recent years the thrust of government borrowings has gradually shifted from the RBI to the market. As the interest rates on government debt have become market related, the weighted average cost of government securities peaked at 13.8 per cent in 1995-96 and has been declining since then. In 2000-01, the cost was 11 per cent. The relative stability of the average interest rate on outstanding debt is due largely to the heavy weight of low-cost old debt. In the years to come, the marginal cost of borrowing is expected to be lower

in view of a generally falling trend in interest rates. As globalisation proceeds, domestic interest rates would come closer to interest rates in leading financial markets abroad.

Table 16.2: The Mounting Burden of Debt and Interest Payments of t	hç
Central Government Since 1996-97	

Year	Annual Borrowings'	Outstanding liabilities ²	interest payments ³	(2) as % of (3)	(4) as % of (3)	(4) as % of (2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1996-97	43	676	60	6.4	8.8	138.3
1997-98	74	778	66	9.6	8.5	89.2
1998-99	90	892	78	10.1	8.7	86.7
1999-00	105	1021	90	10.3	8.8	85.7
2000-01	114	1163	97	9.8	8.3	85.1
2001-02	116	1316	112	8.8	8.5	96.6

- Notes: 1. Including other liabilities like loan guarantees provided by the Govt.
 - 2. Including internal and external liabilities as at March 31 of the respective years. External liabilities converted into rupees at historical rates of exchange.
 - 3. External payments converted to rupees at historical rates of exchange.

Source: Govt. of India, Economic Survey (various years).

It is interesting to note that during 1997-2001, more than 85 per cent of the annual borrowings went to meet interest liabilities alone. The year 1996-97 was remarkable in that interest payments exceeded the entire fiscal deficit by over 38 per cent. In the year 2001-02, more than 96 per cent of the borrowings were consumed by interest payment. As already pointed out, this situation causes a low value of the primary deficit. If the trend continues, entire fresh borrowings would be needed to make interest payments.

At this point, it must be remarked that the interest burden as usually revealed in the official statistics is only an underestimation. Today, the government has to make external debt payments by procuring foreign exchange at present rates of exchange, which are much bigher than the historical rates. Explicitly, acknowledging this fact, The Economic Survey 2001-2002 reads: '....' to get a realistic idea of the outstanding external liabilities, it is appropriate to convert these liabilities by using the exchange prevailing at the end of the reference period. Accordingly, the outstanding external liabilities at end March 2001 were Rs. 1,89,990 crore (9.1 per cent of GDP) compared to Rs. 58,428 crore in terms of the historical exchange rate.' (pp. 46-47). If present exchange rates are applied to debt service payments, their values would be considerably boosted. Even with official statistics, total outstanding liabilities as proportion of GDP (at market prices) are 57.4 per cent as compared to 55.3 per cent in the crisis year of 1991. It is again interesting to note that total assets of the central government as proportion to GDP

in 2000-01 stood at 32.4 per cent compared to total outstanding liabilities at 55.7 per cent. Failure of the government to show assets matching with the liabilities position clearly establishes diversion of borrowing to consumption rather than asset creation.

CONCLUSION

In order to create conditions conducive to the growth of business, it is necessary to improve the overall fiscal environment. In particular, there is an imperative need to:

- Improve the tax/GDP ratio;
- improve the quality of public expenditure by minimising wastage and raising the level and effectiveness of capital expenditure;
- bring the direct and indirect tax rates to international levels;
- expand the tax base;
- rationalise and simplify both direct and indirect taxation structures;
- adopt a comprehensive system of service taxation;
- adopt a comprehensive value added tax system that permits full tax credit for all inputs;
- gradually lower the level of taxes;
- modernise the tax administration system to plug revenue leakages, improve compliance and reduce cost of tax collection; and
- tighten control over revenue expenditure.

These measures require strong political will, rational macroeconomic policies and a thorough professional approach towards fiscal management.

Key Terms

Anti-dumping duty	Excise duty	Primary deficit
Capital gains	Fiscal deficit	Revenue buoyancy
Capital receipts	Global Depository Receipts	Revenue deficit
CENVAT	(GDRs)	Revenue receipts
countervailing duty	Indirect taxes	Special Economic Zones
Custom duty	Inflation	Transfer pricing
Debt trap	MODVAT	Value-added Tax (VAT)
Deficit financing	Money supply	Venture Capital Fund (VCF)
Direct tax		

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Long Questions

- 1. Comment upon India's overall fiscal environment at present. Is it favourable for the growth of the corporate sector?
- 2. Why is India's tax base narrow? How can it be expanded? What are the limitations in this regard?
- 3. What are the major recommendations of the Kelkar Committee on Tax Reforms. What problems do you envisage in the implementation of the recommendations?
- 4. What are the alternative deficit concepts in a government budget? Critically discuss the various aspects of fiscal management in India.
- 5. Examine the role of public borrowings in current fiscal environment. Is the Union Government headed towards a debt trap? Illustrate your answer.
- 6. Is India's fiscal deficit sustainable? Suggest measures to control the deficit.

Short Questions

- 1. What is tax adequacy? Assess tax adequacy in India keeping in view the expenditure requirements of the government.
- 2. What are the basic considerations by which direct tax system in India has been guided in recent years?

- Give three leading recommendations of the Advisory Group on Tax Policy and Tax Administrations for the Tenth Plan, each for direct and indirect taxes.
- 4. What is capital gains tax? Should it be abolished?
- 5. Give atleast seven major recommendations of the Kelkar Committee on tax Reforms.
- 6. Give the logic of value added tax (VAT). Why is its introduction in India being widely resisted?
- 7. Distinguish between fiscal deficit, revenue deficit and budgetary deficit. Why is the concept of fiscal deficit most widely used?
- 8. Distinguish between revenue receipts (and expenditure) and capital receipts (and expenditure) in a government budget giving one example in each case.
- 9. Give three basic challenges of prudent fiscal management in India.
- 10. What is debt trap? Why is it a serious problem?

Practical Assignments

- 'India is among the most heavily taxed countries in the world, yet its tax/GDP ratio is among the lowest'. Hold a group discussion on paradox with the objective to find suitable explanation for the same.
- Study the Union Budget 2003-04 and prepare a term paper on the type of fiscal environment it reflects and its likely impact on the overall environment.
- 3. Study the Budget figures given in Table A and Comment on the seriousness of the fiscal situation. What kind of scenario is reflected by the three types of deficit figures?

Table A: Statistics of the Union Budget 2003-04

Figures in Rs crore	2001-02 Actuals	2002-03 Budget Estimates	2002-03 Revised Estimates	2003-04 Budget Estimates
Revenue Receipts	201449	245105	236936	253935
Capital Receipts	161004	165204	167077	184860
Total Receipts	362453	410309	404013	438795
Non-plan Expend.	261259	296809	289924	317821
Plan Expenditure	101194	113500	114089	120974
Total Expenditure	362453	410309	404013	438795
Revenue Deficit	100162	95377	104712	112292
Fiscal Deficit	140955*	135524	145466	153637
Primary Deficit	33495	18134	29803	30414

Source: Union Budget 2003-04.

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 Table B gives Kelkar Committee proposals for income tax. Compare it with the existing tax rates and discuss how these recommendations seek to improve the present rate system.

Table B: Kelkar Committee Recommendations on Income Tax

	Salaried tax payers		Non-salaried	tax payers	Senior citisens		
income Group	Existing tax	Proposed tax	Existing tax	Proposed tax	Existing tax	Proposed tax	
60,000 to 80,000	0	0	2,196	0	0	0	
80,000 to 100,000	1,587	363	5,452	0	0	0	
1.0 to 1.5 lakh	8,901	6,334	10,697	4,057	0	0	
1.5 to 2 lakh	22,897	15,746	23,522	14,369	7,772	4,369	
2 to 3 lakh	43,353	29,058	44,830	30,872	29,080	20,872	
5 to 10 lakh	185,415	140,886	188,671	154,168	172,921	144,168	
Above 10 lakh	733,666	664,070	1,177,511	1,094,566	1,161,761	1,084,566	

5. Study the trend of public debt figures and discuss how government debt operations affect the environment for private corporate finance.

MONETARY AND CREDIT POLICY ENVIRONMENT

Chapter Outline:

- Constituents of Monetary Environment
- Money Supply Trends
 - Measures of Money Supply
 - □ Concept of Reserve Money
 - □ Sources of Changes in Money Supply
 - □ Changes in Volume and Composition
- Fiscal Limitations on Monetary Management
- Liquidity and Interest Rate Environment
- RBI's Monetary and Credit Policy, 2002-03
 - Monetary Measures
 - Rationalisation of the CRR
 - Bank Rate
 - Export Credit Rate
 - Deposit Account Rates
 - Interest Rate Policy
 - Interest Rate Flexibility
 - Prime Lending Rates
 - Foreign Currency Non-Resident Deposits
 - Foreign Borrowings and Investments by Banks
 - □ Credit Delivery Mechanism for Priority Sectors
- Prudential Measures
- Supervision and Monitoring
- Conclusion

CONSTITUENTS OF MONETARY ENVIRONMENT

Almost all the countries of the world have close monitoring and control over monetary variables through their central banks. In the short run, monetary and credit policy of a country has economic stabilisation as the primary objective; in the long run it seeks to promote the rate of economic growth and tends to have close coordination with other policy tools of macroeconomic management. The goals and targets of monetary policy are already discussed in Chapter 11.

The central bank of a country periodically comes out with monetary and credit policy which is designed and fine-tuned in the light of the prevailing economic circumstances. The policy seeks to align the major monetary variables with the leading macro objectives and is closely watched by business managers and economic analysts as it has wide-ranging impact on the various sectors of the economy. Some of the major areas determined or impacted by the monetary policy are the following:

- Money supply and its composition
- Quantum and direction of credit
- Structure of interest rates (cost of credit)
- Liquidity in the business sector
- The state of banks and non-bank financial institutions
- Competition in the financial sector
- Financial risk
- Government borrowing operations
- Yield on financial assets
- Foreign exchange market and exchange rate
- Financial product development.

These variables constitute the monetary environment, which tremendously affects the financial conditions and competitiveness of business units. Changes in monetary environment necessitate consequent changes in financial planning. Firms that fail or give delayed response to changes in monetary environment end up facing liquidity problems, higher cost of credit or higher financial risk. Monetary changes in the subsequent rounds impact demand, investment, inflation and exchange rates. These impacts have been discussed earlier in Chapter 11.

MONEY SUPPLY TRENDS

MEASURES OF MONEY SUPPLY

The Reserve Bank of India has developed four measures of money supply M₁, M₂, M₃ and M₄ each of which has its own analytical and operational significance. The different components

included in each measure are shown in Tble 17.1. The measures are based on the accounting standards of the Reserve Bank of India and consistent with the methodology of the RBI's Working Group on Money Supply: Analysis and Methodology of Compilation (June 1998):

Table 17.1: Constituents of RBI's Alterna	ative Measures of Money Supply
---	--------------------------------

Money Supply Components	M,	M,	M,	M,
a. Currency held by the public	1	٧	٧	1
b. Net demand deposits of banks	1	1	1	٧
c. Other deposits of the RBI	1	٧	٧	٧
d. Saving deposits with post offices		1		1
e. Net time deposits of banks			٧.	٧
f. Other deposits with post offices				1

Currency refers to the stock of money held (i.e. in circulation) by the public which includes households, business units and institutions. Government and the banking system are excluded from the definition of 'public'. Currency includes not only paper currency but also coins. One rupee notes and coins as well as coins of smaller denomination are the liability of the central government, though these are issued by the RBI on behalf of the government. Currency notes of higher denominations are issued by the RBI.

Net demand deposits of banks are the total demand deposits minus interbank deposits. Interbank deposits are not included here as these are not held by the public (as defined above). Demand deposits are the deposits, which are held by the public in banks and are readily withdrawable on demand. Demand deposits include deposits in current account as well as those freely withdrawable or the withdrawn portion of saving deposits of the public. If there were no restrictions on the withdrawal of saving deposits, the whole of these would be counted in demand deposits. However, there are restrictions in the form of number of withdrawals, minimum balance requirements etc. These vary from bank to bank. 'Other deposits of the RBI' is an ignorable small component of M₁ and consists of non-government, non-bank deposits of quasi-government institutions (like IFCI), foreign governments or their central banks and multilateral institutions.

Time deposits (also call term deposits or fixed deposits) have a time dimension. These are not withdrawable at will or on demand and have a maturity period, which may range from a few days to a number of years. These deposits do not have cheque facility for withdrawal and can be withdrawn before maturity only after payment of some monetary penalty through a procedure. Time deposits can be made by way of single one-time deposit or through periodic deposits over their maturity.

Just like banks, post offices also keep saving and time deposits of the public. Post offices generally don't keep current accounts and the freely withdrawable portion of their deposits is also small. Advance notice on large withdrawals, restrictions on the number of withdrawals and relatively complex procedures are some of the limitations on the free withdrawability of saving deposits.

The four measures of money supply, M_1 to M_4 , are in the descending order of liquidity but in ascending order of size. M_4 , by definition, has the largest value but least liquidity; it is also referred to as the **Aggregate Monetary Resources** (AMR). M_1 is conventionally known as narrow money based on the narrow concept of money and M_1 as broad money. At present, M_2 is the most widely used measure for macroeconomic and monetary analysis though M_1 also has immense analytical significance. Money supply data is required to analyze and explain inflation, interest rate movements, liquidity conditions, exchange rate movements and even the rate of GDP growth. A business manager must watch money supply developments as these variables determine and impact the business environment.

THE CONCEPT OF RESERVE MONEY

'Reserve Money,' also called 'base money' or 'high-powered money', stands distinct from any of the above concepts of money supply. Technically, reserve money concept, as used in the various RBI documents, includes the following:

- a. Currency held by the public
- b. Cash reserves of the banks and
- c. Other deposits of the RBI.

Currency held by the public consists of one rupee notes and coins and other coins of smaller denominations issued by the government as well as currency and coins of higher denominations issued by the RBI. So, the RBI currency and coins plus (b) and (c) above constitute what is called 'Reserve Bank Money' and represents the monetary liability of the RBI. The supply of Reserve Bank money is determined basically in the following manner:

- Net Reserve Bank credit to the government. plus
- Reserve Bank Credit to commercial and development banks; plus
- Net foreign exchange assets of the RBI; minus
- Net non-monetary liabilities of the RBI.

So, reserve money is produced by the government and the RBI and is held both by the public and the banks.

In the overall reserve money, the proportion of government money is quite small (less than 10 per cent) so that reserve money is predominantly the Reserve Bank money. Reserve money does not include bank deposits but cash reserves of banks. This is the active or dynamic money supply concept. In a **fractional reserve system**, the power of the banks to create credit and deposits in a typical credit (or deposit) creation process depends critically on cash reserves of the banks. The overall supply of money depends on the supply of reserve money and the process of determination of overall money supply is described by what is called the **money multiplier**. The discussion of the theory is beyond the scope of this book. The concept of reserve money occupies an important place in the Reserve Bank analysis of monetary developments and prescription of monetary policy.

SOURCES OF CHANGE IN MONEY SUPPLY

The sources of change in money supply (M₁) are the following:

- a. Net Bank Credit to Government. This includes net credit of the RBI and commercial banks' credit to both central and state governments.
- b. Bank Credit to Commercial Sector. This includes credit to the commercial sector both from the RBI and the commercial banks.
- c. Net Foreign Exchange Assets of the Banking Sector. This includes foreign exchange assets of the RBI as well as of the commercial banks authorised to deal in foreign exchange. The banking sector releases domestic currency against the acquisitions of foreign exchange.
- d. Government's Currency Liabilities to the Public. This is the equivalent of the currency with the public. The total currency issued is ultimately the liability of the government.
- e. Banking Sector's Net Non-monetary liabilities (other than time deposits).

Trends in Volume and Composition

During the period 2000-2002, M₁ has grown at an average annual growth rate of about 11 per cent; currency with the public as well as demand deposit of the banks are also growing at almost the same rate. Growth rate in M₃ has been faster. In the year 2001-02, M₃ grew at 14 per cent compared to 16.8 per cent in the previous year. The relatively faster growth of M₃ is attributed to the higher growth rate of the time deposit component of M₃. During 2000-01, aggregate deposits of banks grew at 18.4 per cent compared to 14.3 per cent in 2000-2001. In 2001-02, currency with the public grew faster at 15.2 per cent compared to 10.8 per cent in 2000-01. The projected rate of growth of M₃ for the year 2002-03, as contained in the RBI Monetary and Credit Policy, 2002-03, is 14.0 per cent.

Reserve money grew at 11.4 per cent during 2001-02 (i.e. by about Rs. 34,500 crore) as compared to 8.1 per cent in 2000-01. The growth in the reserve money during 2001-02 was almost entirely due to the increase in net foreign exchange assets, which increased by about 34 per cent. In 2000-01, net foreign exchange assets rose by about 19 per cent. The net domestic assets of the RBI fell as a result of decline in net RBI credit to the government as well as the commercial sector showing a comfortable liquidity position in the market.

Table 17.2: Growth Rates in Money Supply and its Constituents, 2000-02

(% increase)

Money supply measure/components	2000-01	2001-02	
Currency with the public	10.8	15.2	
Demand deposits with banks	11.3	7.2	
Time deposits with banks	19.1	5.4	
Other deposits with RBI	19.6	-21.5	
M, (Narrow money)	11.1	11.4	
M _a (Broad money)	16.8	14.2	

Sources: 1. Govt. of India, Economic Survey, various issues.

2. RBI, Statement on Monetary and Credit Policy, 2002-03.

FISCAL LIMITATIONS ON MONETARY MANAGEMENT

Government borrowings needed to bridge the fiscal deficit have many money monetary implications and complicate the task of monetary management. Fiscal deficit of the Central government, as per revised estimates of the 2002-03 budget, was about Rs. 1,31,700 crore against the original budget estimate of about Rs. 1,16,000 crore and the net market borrowings at about Rs. 92,000 crore (gross borrowings at Rs. 1,34,000 crore) exceeded the budget estimate by about Rs. 15,000 crore. The combined slippage (excess) of the borrowing target of the central and state governments was to the tune of about Rs. 19,000 crore. However, the massive borrowing operation could not exert an upward pressure on the interest rates due to excess liquidity conditions in the market and slump in credit demand. Under normal circumstances, the borrowing compulsions might have frustrated the monetary management objective of reducing the rate of interest and the cost of capital to make the industry more competitive.

Monetary management depends, to a great extent, on its ability to influence bank credit in the economic system. The effectiveness of monetary management gets impaired when banks divert funds from credit to investment in government securities, which are issued as a part of the borrowing programme of the government. As a result of massive and recurrent borrowing programme of the government, the holding of government securities by the banking system in 2001-02 stood at about 37 per cent of its demand and time liabilities (DTL) which is 12 per cent higher than the minimum statutory liquidity ratio of 25 per cent. The 12 per cent excess investment in government securities comes to about Rs. 1,40,300 crores which exceeds even the gross borrowings of the government for the year 2001-02. The excess investment may be partly due to choice rather than compulsion of the banking system but an element of moral compulsion particularly for public sector banks is invariably behind it. The net effect of excessive fund diversion to government securities is that it impairs the ability of the banking system to respond to the present and the immediate future requirements of productive credit to the commercial sector.

LIQUIDITY AND INTEREST RATE ENVIRONMENT

Over the last few years, monetary environment has been characterised by easy liquidity conditions and softening interest rate structure. Since the year 2000-01, the general stance of various monetary policies has been to maintain adequate liquidity. It has been possible to do so in spite of massive borrowing programmes of the government in successive years because of the recessionary conditions in the economy. The result has been that there has been a gradual and sustained fall in the structure of interest rates. The fall has been supported by falling cash reserve ratio (CRR) of the banks and fall in the bank rate over the years.

The overall stance of monetary policy of the year 2001-02 was to provide adequate liquidity to meet the requirements of credit growth keeping at the same time a close watch on the inflationary situation. The recently introduced liquidity adjustment facility (LAF) provides a flexible and effective mechanism for injection and/or absorption of liquidity on a day-to-day basis thus smoothening the functioning of the call money market. Open market operations, however,

continue to be an active instrument of demand management of liquidity. The stance of monetary and credit policy for the year 2002-03 continues to be provision of adequate liquidity to meet the credit and investment requirements of the economy and sustenance of efforts in the direction of declining of interest rates as shown in **Table 17.3**.

Int	erest Rate	5 Jan 2000	4 Jan 2002	10 Jan 2003	
1.	Bank rate	8.00	6.50	6.25	
2.	IDBI rate	13.00	12.50	12.50	
3.	Prime lending rate ¹	12.25	11.50	10.63	
4.	Deposit rate ²	9.25	8.00	6.00	
5.	Call money rate ³	9.65	6.86	5.25	
6.	Certificate of Deposits ³	9.75	7.25	5.60	
7.	Commercial papers ³	11.10	9.43	6.60	
8.	91-Day Treasury Bills	8.75	6.83	5.39	
9.	364-Day Treasury Bills	9.99	7.00	5.41	

Table 17.3: Trend in Interest Rate Structure, 2000-02

- 1. Mean value of the prime lending rates of five major public sector banks.
- 2. Mean rate on deposits of maturity exceeding one year.
- 3. Average rate prevailing on the day.

Source: Govt. of India, Economic Survey, 2001-02.

The general fall in the structure of interest rates may not be attributed entirely to the domestic liquidity environment and the monetary policy. To some extent, the trend is in line with global interest rates. With gradual globalisation of the economy and internationalisation of the financial markets, it is natural to expect the domestic interest rate structure to come closer to international levels. The fall in the interest rates is more on the deposit rather than credit side. Some of the major factors responsible for the relative downward inflexibility of interest rates in 2001-02 on credit have been the following:

- A substantial portion of long-term deposits of banks being at fixed rates, the average cost of deposits continued to be between 6.25-7.25 per cent.
- Higher cost of funds to the banks due to the high overhang of non-performing assets.
- Relatively higher level of non-interest operating costs (2.5-3.0 per cent of total assets) which have to be met through higher interest spreads.
- Banks are major subscribers to government securities, which are held even in excess of
 minimum SLR requirements. As return on these securities is reasonably good, banks do
 not feel the compulsion to lower interest rates on credit.

The downtrend was continued during the year 2003 (as till August).

RBI'S MONETARY AND CREDIT POLICY, 2002-2003

The Monetary and Credit Policy of the RBI is an important determinant of the monetary environment of the country. It is a vital instrument of changes in monetary and credit interest rate structure, liquidity condition and overall financial sector reforms. The basic policy is announced every year in the month of April and fine-tuned and revised version appears generally in October as mid-term review. The broad focus areas of the policy are the following:

- Structural and regulatory measures to strengthen the financial system.
- To improve the functioning of the various segments of the financial market.
- To re-define the regulatory role of the RBI.
- To strengthen the prudential and supervisory norms for the financial sector.
- To improve credit delivery system.
- To develop technological and institutional infrastructure of the financial sector.

The policy takes a few further steps in the direction of deregulation, and liberalisation of the financial sector to make it more competitive in the global context. In the direction of fulfilment of the above objectives, the stance of the policy announced in April 2002 and fine-tuned in October 2002 contains the following strategic elements.

MONETARY MEASURES

The main monetary measures undertaken in the policy are the following:

Rationalisation of the CRR

Towards the medium term objective of reducing the cash reserve ratio to statutory minimum level of 3.0 per cent of total demand and time liabilities of scheduled commercial banks, the RBI lowered the ratio from 5.5 per cent to 5.0 per cent from June 2002. In recent years, CRR has been declining consistently (Table 17.4). In addition, all categories of banks, including cooperative banks, have been brought under the requirements of CRR as in the case of scheduled commercial banks. CRR has also been rationalised by removing a number of exceptions granted to banks on the basis of specific categories of demand and time liabilities. The reduction of CRR enhances the lendable resources of the banks and is expected to strengthen the money market.

Table 17.4: Trend in CRR Since 1998

(%)

Month/Year	CRR
August 1998	11.0
May 2001	7.5
October 2001	5.5
June 2002	5.0

Source: RBI Statement on Monetary and Credit Policy for the year 2002-03.

In the mid-term review in October 2002, the CRR was further reduced by 0.25 per cent releasing additional Rs. 3000 crore in the economy. The measure is aimed at providing greater flexibility to banks in their fund management. However, as CRR is reduced in spite of excess liquidity conditions in the financial market, it might make it easier for the government to meet its borrowing requirements. Further, in a major departure from the earlier position, since November 2002 (till the next policy change in this regard), banks are required to maintain at least 80 per cent of the required CRR amount on a daily basis during a fortnight. For the sake of keeping a safety margin, banks generally maintain higher CRR level than statutorily required.

Bank Rate

Like CRR, there has been a declining trend in the bank rate as well. However, in 2002-03, bank rate has been left unchanged at 6.5 per cent in view of the already easy liquidity condition in the market. On a number of occasions, the call money rates have been lower than the bank rate as well as the repo rate (see Chapter 24). However, the policy provides for the adjustment of the bank rate as and when the actual economic conditions so warrant. The flexibility was exercised and the bank rate was marginally scaled downwards by 25 basis points (i.e. 0.25 per cent) to 6.25 per cent – the lowest rate since 1973. The rate fall is in line with the global movement in interest rates and signals a fall in the overall structure of interest rates. As central and state governments obtain their Ways and Means Advances (WMA) at the bank rate, it will lead to marginal decline in their cost of borrowings under this category. The fall in the bank rate is also accompanied by the same marginal cut of 25 basis points in the repo rate (the rate at which RBI borrows from the banks and at which overnight or very short period deals are struck by the money market participants. (See, Chapter 24 for further details on repo deals).

Export Credit Rate

In order to make the exporters internationally competitive, the policy provides for reduction in the ceiling rate on export credit to LIBOR + 0.75 percentage point from the earlier rate of LIBOR + 1.0 percentage point (Box 17.1). In order to reduce foreign currency risk, the policy encourages exporters to raise foreign currency loans in more than one foreign currencies. The policy further prescribes continuance of interest rate ceiling on export credit (both pre-shipment and post-shipment) of 2.5 percentage points below PLR upto September 30, 2002. As a result, the ceiling on pre-shipment credit works out to 7.5-8.5 per cent for most public sector banks. Keeping in view the fact that exporters can sell their foreign exchange earnings in the forward market with forward premium, the effective cost of export credit works out to an average of 2.0-3.0 per cent – which is quite competitive by international standards. For the sake of transparency, banks are required to report to the RBI minimum and maximum rates on export credit. The policy highlights the need for deregulation of interest rate on export credit so that the rate may possibly come down in the wake of renewed competition among banks.

Deposit Account Rates

The policy continues to provide freedom and flexibility to banks to determine deposit rates of various types depending upon their tenor and size. However, the interest rate on saving account with cheque facility continues to be administered at 4.0 per cent (which gives an effective yield of 3.4 per cent per annum as interest is payable on the minimum balance between the 10th and the

last day of each month) as such accounts are maintained by millions of individuals and households. The policy lays down the need to deregulate this rate as well but provides that the time is not yet ripe for such a step. The RBI is generally cautious in lowering the interest rate on saving deposits as it adversely affects a very large number of small savers. However, individual banks tend to lower rates of interest on various categories of deposits as a consequence of a fall in the bank rate in the revised credit policy. For example, in November 2002, State Bank of India reduced deposit rates by 50 basis points after bank rate fell by 25 basis points. The RBI has also impressed upon the cooperative banks, local area banks and regional rural banks (which maintain relatively higher deposit rates) to rationalise their deposit rates in line with the rates prevailing in the banking industry.

INTEREST RATE POLICY

The main components of the interest rate policy are the following:

Interest Rate Flexibility

During the year 2001-02, though the interest rates have shown remarkable downward flexibility on long-term government securities and deposit rates, there has been relative inflexibility in the commercial lending rates. The policy recommends flexible interest rate system for all new deposits with reset at six-month intervals. It further recommends measures to motivate depositors to shift from fixed-interest past deposits into new deposits at variable rates without penalty for pre-mature withdrawal.

Prime-Lending Rates (PLRs)

The policy requires the banks to announce their PLRs as well as the spreads over the PLR for all credits (except consumer credit). In the light of the prevailing interest rate environment, the policy expects the banks to maintain reasonable spreads below PLR and other lending rates. To enable the business sector to keep the cost of capital within limits, the policy requires the banks to announce the maximum spread so that RBI can monitor the same. For customer service and protection, the policy requires the banks to show transparency with regard to the various interest rates and charges for both the categories of depositors and borrowers. In particular, it requires the banks to explicitly reveal to individual borrowers the processing charges, services charges etc, if any, under the 'all cost' concept.

BOX 17.1

What is London Inter-Bank Offered Rate (LIBOR)?

It is the rate at which major banks in the London inter-bank market offer to make **eurocurrency** deposits with each other for a given maturity normally between overnight and five years. It is the base or the reference rate which is used as a basis for determining interest rates by banks in other **money markets**. London money market is considered to the hub of the world money markets in eurocurrencies. Eurocurrency market is a market for bank deposits and loans denominated in a currency other than that of the country in which the bank is located. Linking of export credit rate to LIBOR is a step towards global integration of the Indian money market.

In the October 2002 revision of the policy, RBI introduced phased deregulation of the export credit rates. With effect from May 2003, the new policy provides for deregulation of the ceiling rate of PLR plus 0.5 percentage points applicable on pre-shipment credit for 180-270 days and post-shipment credit for 90-180 days in the first phase. Subsequently, banks have been given freedom to provide export finance at or below their prime lending rates. Under the revised policy, exporters have been allowed to repay pre-shipment credit out of balances held in their export earners foreign currency (EEFC) accounts. Prior to this provision, exporters could liquidate their pre-shipment credit out of export bills after the shipment of goods. The relaxing provision has been made in view of the comfortable position of foreign exchange reserves in the country.

Foreign Currency Non-Resident (FCNR)(B) Deposits

The policy liberalises the fund deployment norms for the funds mobilised under the FCNR (B) deposit scheme. Under the scheme, the banks accept deposits for a period of 1-3 years at both fixed and floating rates subject to the ceiling of LIBOR/swap rates. Before the policy, there were certain restrictions on the deployment of such funds and the banks could lend the funds to. Indian residents for their foreign exchange requirements and Financing of joint ventures or for wholly owned subsidiaries established by resident corporate. These restrictions raised the possibility of asset-liability mismatches for banks as the asset side could have a possibly shorter maturity. It also exposed the bank to larger foreign exchange risk. The policy now permits the banks to invest the FCNR (B) funds in longer term fixed-income instruments provided these have satisfactory level of rating. In view of the falling level of international interest rates, the ceiling rate on these deposits for the corresponding maturities have been reduced to LIBOR/swap rate minus 25 basis points.

Foreign Borrowings and Investments by Banks

The policy enhances the scope for foreign borrowings and investments of commercial banks. Before the policy, the banks were allowed to borrow from and invest funds in the foreign markets to the extent of 15 per cent of their unimpaired Tier I Capital or US \$15 million, whichever was higher. As a further step towards globalisation of Indian banks and to align the domestic interest rates to international rates, banks have been allowed to borrow up to 25 per cent of their unimpaired Tier I capital from the overseas market. The borrowings, however, shall be subject to the banks' open position count and maturity mismatch limits (called Gap Limits). Similarly, the 15 per cent limit for investment overseas has been raised to 25 per cent of the unimpaired Tier I Capital, subject to the same limits as mentioned above. The increased access to foreign markets is expected to reduce their cost of funds and improve their revenue position. Simultaneously, it will secure closer integration of the Indian financial system with the global market.

CREDIT DELIVERY MECHANISM FOR PRIORITY SECTORS

The policy provides a number of measures for improvement in the effectiveness of the delivery of credit for various borrower segments, particularly in the priority and small-scale sectors. In particular, the policy prescribes the following measures.

- Increase in the credit limits for financing distribution of inputs for activities allied to agriculture (like cattle feed and poultry feed) from Rs. 15 lakh to Rs. 25 lakh.
- Increase in the credit limits for marketing of crops (pledge limits) from Rs. 1 lakh to Rs. 5 lakh and repayment schedule of such credit expanded from 6 months to 12 months.

- Freedom to banks to increase the limit of dispensation of collateral requirement for loans to tiny and small-scale units from Rs. 5 lakh to Rs. 15 lakh, depending upon the merit of each case. The dispensation of collateral requirement for loans up to Rs. 5 lakh was announced by the RBI in its annual policy statement of April 2000 to improve the flow of credit.
- Assignment of a lower risk weight of 50 per cent for capital adequacy (as against earlier 100 per cent) on bank loans against residential housing property (risk weight continues to be 100 per cent on loans against commercial property. The measure is expected to augment the flow of credit to residential as compared to commercial housing sector.

These measures are designed to increase the flow of credit to priority segments and impart greater flexibility to the credit delivery mechanism.

In the revised Monetary and Credit Policy of October 2002, credit limits for selected segments of the priority sector including agriculturists, rural artisans, village and cottage industries and self-help groups have been enhanced. Banks were given the target of agricultural advances at the rate of 18 per cent of total credit to achieve by March 2003. In 2002, the mean level of achievement of public and private sector banks in this regard was 15 per cent and 9 per cent respectively.

PRUDENTIAL MEASURES

The policy highlights the need for a sound and healthy banking system through the adoption of prudent financial practices particularly the international standards on capital adequacy and prudential norms. In this regard, RBI has already initiated a series of banking reforms as per recommendations of the Committee on the Financial System. In the annual policy statement of April 2001, banks were asked to adopt a 90-day norm to classify their assets (Box 17.2) from the year 2003-04. Earlier, RBI in its mid-term review of the policy in October 1998 provided that with effect from March 31, 2001, an asset should be classified as doubtful if it remained in the sub-standard category for 18 months. The Narsimhan Committee II has proposed that with effect from March 31, 2005, an asset would be classified as doubtful if it remained in the substandard category for 12 months.

BOX 17.2

Asset Classification Norms for Commercial Banks

With effect from March 31, 2001, a non-performing asset (NPA) is an advance where:

- Interest and/or installment of principal remain overdue for a period of more than 180 days for a term loan;
- The account remains overdue for a period of more than 180 days in respect of an overdraft or cash credit;
- The bill remains overdue for a period of more than 180 days in case of bills purchased and discounted:
- Interest and/or installment of principal remains overdue for two harvest seasons (maximum one year) in case of agricultural advances;
- Any amount to be received for a period of more than 180 days in case of other accounts. An NPA may be classified into sub-standard, doubtful or loss asset. A sub-standard asset is one which remain NPA for a period up to 180 days. An asset is doubtful if it remains NPA for more than 180 days. A loss asset is one which has been identified by bank auditors or the RBI but it has not yet been written off.

SUPERVISION AND MONITORING

The policy seeks to streamline the existing RBI system of supervision and monitoring of scheduled commercial banks the highlights of which are summarised below:

- With effect from October 2001, RBI has made a monthly mandatory schedule for the banks to report on (a) interest rate sensitivity (b) structural liquidity for both rupee and forex transactions (c) asset liabilities and exposures (d) exposure to sensitive sectors and (e) Indian subsidiaries. The measure is aimed at rationalisation of off-site monitoring of liquidity and risk of banks by the RBI.
- RBI plans to switch over to risk based supervision of banks by the year 2003. The Project Implementation Group formed for the purpose has already prepared risk assessment template for risk profiling of banks.

The banks are already required to attach risk weights to their assets to project a more realistic picture of their balance sheets and asset performance. The provisions of the Monetary and Credit Policy 2002-03 relating to the money market are separately discussed in Chapter 24.

CONCLUSION

It can be seen from the successive monetary and credit policies in the recent years that there is a distinct thrust in the direction of the development of the monetary system, control of inflation; reducing obstructions in the flow of credit to the productive sectors of the economy and greater coordination with the fiscal policy. There has been a gradual trend, through slow, in the direction of integrating India's monetary sector with the global system. There is greater recourse to the market system and the rigour of the RBI control is gradually softening. For the banking industry, the move towards the adoption of best global practices is clearly noticeable. These are some of the welcome signs for the corporate sector which must restructure its financial policies to take advantage of the unfolding opportunities.

Key Terms

Bank rateq
Base money
Broad money
Capital adequacy
Cash reserve ratio (CRR)
Central bank
Demand and Time Liabilities
(DTL)
Demand deposits
Euro-currency
Exchange rate

Fractional reserve system High-powered money Inflation Inter-bank deposits LIBOR Money market Money multiplier Multilateral institutions Narrow money

Open market operations

Foreign Currency risk

(OMOs)
Pre-shipment credit
Prime Lending Rate (PLR)
Prudential norms
Repo rate
Reserve money
Time deposit
Unimpaired Tier-I capital
Ways and Means Advances
(WMA)

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Long Questions

- 1. How does monetary environment impact financial decision of a business organisation? Discuss the present state of monetary environment in the country.
- 2. Discuss recent money supply trends in the country. To what extent is the present monetary environment favourable for the growth of the corporate sector?
- 3. Explain the stance of RBI's Monetary and Credit Policy for the year 2002-03. What is the rationale of the policy?
- 4. Discuss the present state of liquidity and interest rate environment in the country. Is the environment conducive for the competitiveness of the corporate sector?
- 5. Account for the declining structure of interest rates in the country. What are the implications for the corporate sector?

Short Questions

- 1. What are the constituents of monetary environment?
- 2. What are the basic factors which affect the flow of credit?
- List the broad areas that are directly impacted by monetary policy.

- 4. Describe the alternative measures of money supply in India.
- 5. Distinguish between (a) Broad money (b) Narrow money and (c) Reserve money.
- 6. What are the sources of changes in money supply in the country?
- 7. Comment upon the composition of money supply in the country at present.
- 8. Explain the relation between fiscal deficit and monetary management.
- 9. Give three major reasons for the growth of inter-bank call money market in the country.
- 10. Give three reasons for gradually falling interest rate structure in the country.
- 11. Write a short note on the prudential norms for commercial banks in the country.
- 12. What are non-performing assets?

Practical Assignments

- 1. Hold a panel discussion on the 'Implications of falling Structure of Interest Rates for the Corporate Sector'. Four persons, each representing Ministry of Finance, the RBI, a Commercial bank and a finance manager of a company can constitute the panel.
- 2. Hold interviews of about 10 finance managers of different business organisations of your region and find out (a) which provisions of RBI's Monetary and Credit Policy are most relevance and important from their point of view; and (b) how changes in the policy have affected their financial decisions. Share the results with the class.
- Study the latest Monetary and Credit Policy and find out:
 - (a) The points of missing dynamism;
 - (b) How it seeks to raise public investment;
 - (c) How it seeks to keep inflation under check;
 - (d) How it affects exporters; and
 - (e) How does it further monetary reforms. Groups of three students each can pick up the above assignments? The lead groups can present an integrated report to the class for an open house discussion.
- 4. Surf the Monetary and Credit Policies of the RBI during the last 3 years and assess to which extent the policies have been successful in integrating India's monetary sector with the global system.

THE INFLATIONARY ENVIRONMENT

Chapter Outline:

- Current Inflationary Situation
- Why Inflation Rates based on WPI and CPI Diverge?
- Sectoral Analysis of Current Inflation
 - □ Price Movements in Primary Products
 - □ Price Trends in Fuel, Power, Light and Lubricants
 - □ Inflation in the Manufacturing Sector
 - □ Sectoral Contribution to Inflation
- General Factors of Low-Inflation Environment
- Monetary Explanation of Recent Price Situation
- Inflation Targeting
- Role of Government in Inflation Management
- Conclusion

CURRENT INFLATIONARY SITUATION

One of the strong fundamental of the economy has been economic stability characterised by a low rate of inflation in the recent years. The annual rate of inflation based on wholesale price index (WPI) on point-to-point basis remained between 4-5 per cent during 1995-99, peaked at 6.5 per cent in 1999-2000 and has declined in the next couple of years (Table 18.1). The mean annual rate of inflation during the quinquenium 1996-97 to 2000-01 comes to about 5.3 per cent (on year-end point to point basis), compared to 9.3 per cent during the period 1991-92 to 1995-96. Similarly, the inflation rate based on consumer price index (CPI) for industrial workers (CPI-IW), the most popular index used, has on the average been less than 5 per cent after 1998-99 when it was 8.9 per cent. The use of CPI to measure the rate of inflation is explained in Box 18.1.

Table 18.1: Rates of Inflation Based on Wholesale and Retail Price Indices (1993-94=100)

Year	inflation rate (%)			
	WPI¹	WPI ²	CP1	
1995-96	4.4	8.0	10.1	
1996-97	5.4	4.6	9.2	
1997-98	4.5	4.4	7.2	
1998-99	5.3	5.9	13.1	
1999-2000	6.5	3.3	4.7	
2000-2001	4.9	7.1	4.0	
2001-2002	1.6	3.6	4.9	

Notes: 1. It is the wholesale price index measured at year-end on point-to point basis.

- 2. It is the wholesale price index based on 52-week average.
- 3. It is Consumer price index based on average of periods indices.

Source: Govt. of India, Economic Survey, various years.

Box 18.1

How is Consumer Price Index (CPI) Used to Measure Inflation in India

inflation based on consumer price index (CPI) basically measures changes in retail prices facing the consumer. This is in contrast with wholesale price index (WPI) which measures changes in wholesale prices facing producers in terms of inputs.

There are three types of CPI in India for:

- Agricultural labour (CPI-AL);
- Industrial workers (CPI-IW); and
- Urban non-manual employees (CPI-UNME)

The above three categories of population are differentiated as their consumption

baskets differ significantly and these categories are large segments. The weight commanded by the food products, for example, would be highest in the first, lower in the second and the last in the third category. Construction of the index for a particular category involves the following basic steps:

- Identifying items in the consumption basket;
- Assigning a weight for each item in the overall index on the basis of its share in total expenditure; and
- Selecting an appropriate base year and assigning the value 100 to use base year

index as benchmark for future prices. (Also see box 10.1)

The first two steps require a household or consumer survey. CPI-IW has 1982 as the base year and measures monthly movements in retail prices of goods and services in various industrial townships. The measure is used by the Central Government to decide wage compensation, generally twice a year. CPI(UNME) has 1984-85 as the base year and is used by banks for wage compensation. CPI(AL) has 1986-87 as the base year and is used for fixing and revising minimum wages in agriculture. The composition of commodity basket in the three measures differs widely.

Source: Based on 'Figuring out the CPI' Economic Times, 9 September 2002 and Govt. of India Economic Survey, 2001-02.

WHY DO INFLATION RATES BASED ON WPI AND CPI OFTEN DIVERGE?

Before proceeding further, it is prudent to understand the relation between WPI based and CPI based rates of inflation. Generally speaking, we should expect a high degree of positive relation between the two as rising wholesale prices eventually reflect in rising retail prices through the distribution chain. However, this may not always be the case. Changes in wholesale prices may induce more than proportionate, equi-proportionate less than proportionate or even no change in retail prices. Changes in retail prices can be more than proportionate if:

- The demand for the products is relatively inelastic;
- Retailers' margins are expanding;
- There are local shortages or transport bottlenecks;
- Local taxes are rising; or
- There is rising pressure of local demand.;
 Simil arly, induced changes in retail prices can be less than proportionate, if:
- Retailers' margins are falling;
- There is recession in the retail markets;
- Local taxes are falling;
- Producers absorb a part or all of the rising costs in the wake of rising wholesale prices in their profits;
- Producers are able to offset, partly or completely, the rising wholesale prices of inputs by increasing economies of scale;
- The demand for the products is relatively more elastic.

In a particular year, WPI-based and CPI-based rates of inflation may be weakly correlated in the retail price changes in the next year. Such situations arise when firms' inventory levels increase and goods stay there longer in periods of market slump or fall in the market share of their products. However, when slump sets in or develops into recession, firms are not able to realise full prices and have to give promotion benefits to the consumers. In the subsequent rounds, the demand for products in the wholesale market declines causing wholesale prices to fall. Thus, in transition from normal business to slump conditions or vice versa, the correlation between the two price indices may be weak but it tends to be higher in periods of stable normal business as well as in settled recession. From April 2001 to August 2002, annual rate inflation on WPI was consistently higher than that based on CPI (on point-to-point) and from September 2002 to December 2002 the trend was exactly the opposite.

The divergence between the two rates can be seen in **Table 18.1**. First of all, it must be realised that divergence in the WPI¹ and WPI² is due to differences in the methodology of the construction of the two indices with regard to the point or period of time at which price data are collected and averaged. The spread between WPI and CPI is highest for the year 1998-99 and least for the year 2000-2001. The retail prices are much less subject to control by the government policy and the high spreads in certain years has led to pressure on the government to control retail prices which directly impact consumer interests. The wedge is also accounted for by the different base years – the year 1993-94 for the WPI and the year 1982 for the CPI-IW, which continues to be unchanged even after 20 years.

SECTORAL ANALYSIS OF CURRENT INFLATION

It will be illuminating to see what the present inflationary scenario is composed of. Annual inflation in 2001-02 can be seen in terms of inflation in major product groups. For this purpose, three major product groups are identified:

- 1. Primary Products Group: It consists of the following sub-groups
 - Food articles including food grains, pulses, fruits and vegetables, eggs, meat and fish, condiments and spices and other food items including tea and coffee.
 - Non-food articles including raw cotton and jute, oilseeds, groundnut seeds and rape and mustard seeds.
 - Other non-food articles including sugarcane.
 - Minerals
- 2. Fuel, Power, Light and Lubricants including coal mining, mineral oil and electricity.
- 3. Manufactured Products consisting of the following sub-groups of products
 - Food products including sugar and edible oils.
 - Beverages, tobacco and its products.
 - Textiles.
 - Wood and its products.

- Paper and its products.
- Leather and its products.
- Rubber and plastic products.
- Chemicals and chemical products.
- Metals, products and alloys.

- Non-metallic mineral products, including cement.
- Machinery and machine tools.
- Transport equipment and parts.

General rate of inflation can be seen as the weighted average rate of inflation in these product groups and sub-groups. These products can also be reclassed into administered items, seasonal items, raw materials and essential commodities because of their analytical and individual significance from the point of view of users, consumers, price sensitivity and public welfare. The weight of the individual groups and sub-groups depends on the share of these groups in the total production and the weights keep changing as production structure changes with time. Table 18.2 gives the weights and inflation rate of the separate groups and their respective contribution to inflation during the period 2000-2002.

Product Group	Weight (%)	Inflation rate (%)		Contribution to overall inflation (%)	
		2000-01	2001-02	2000-01	20001-02
Primary products.	22.0	4.0	3.0	10.8	50.0
Fuel, power, light, lubricants	14.2	31.0	3.2	58.4	48.0
Manufactured products	63.8	4.4	0.1	30.7	2.0
All Products	100.0	8.7	1.3	100.0	100.0

Source: CSO data.

PRICE MOVEMENTS IN PRIMARY PRODUCTS

In the current scenario, primary products have shown remarkable stability with a low rate of inflation of 3.4 per cent. Such products command a weight of 22 per cent in the overall index. Within this group, the rate of inflation in food items has again been in the range 3.1 to 4.1 per cent over the period 2000-02. Within the food group, it is interesting to find that there has been wide variability in inflation rate of individual products (Table 18.3). For example, in 2001-02, potatoes showed the highest rate of inflation at 163 per cent whereas tea showed a negative rate of inflation (i.e. fall in prices) of -31.3 per cent. The moderate rate of inflation in the category of food items is the result of rising and falling prices of many individual constituent products. The products, which recorded falling prices, included rice, wheat, onions, condiments and spices, coffee and the groups of other food articles.

Within the primary products, non-food articles experienced an inflation rate of 6.3 per cent in 2000-01 and a marginally negative inflation rate of -0.3 per cent in 2001-02 (table 18.3). The inflationary swing has been in most marked in case of cotton the inflation rate of which swung from 15.3 per cent to -14.6 per cent in the two years respectively. Similar swing is found in the case of seed rape and mustard seed where inflation rate fluctuated from -13.8 per cent in 2000-01 to 8.2 per cent in 2001-02. In the overall category of fibres, the swing was from 16.4 per cent to -11.8 per cent in these two years. The inflation rate for sugarcane cooled down from 10.5 per cent to 6.2 per cent and for minerals from 12.5 per cent to 4.6 per cent in the years 2000-01 and 2001-02 respectively.

PRICE TRENDS IN FUEL, POWER, LIGHT AND LUBRICANTS

This subgroup which produces energy products has a weight of 14.2 per cent in the overall index. Most of the products of the sector fall within the purview of administered price mechanism. The prices of these products significantly affect prices in agricultural and industrial sectors. It is for this reason that these prices are well regulated and monitored by the government, through very recently there have been trends cowards deregulation.

The subgroup experienced a high rate of inflation of 31.4 per cent in 2000-01 but had a steep fall to 3.2 per cent in 2001-02. In the petroleum segment, inflation rate was extra-ordinarily high at 42.1 per cent in 2000-01 but had a negative inflation rate of -4.3 per cent in 2001-02. Domestic petroleum prices are linked to international prices of crude oil and are periodically revised as international prices change. Domestic prices are however not adjusted as frequently as international price changes but in discrete steps and not necessarily in the same proportion. In the opposite contrast to petroleum prices, inflation rate in the coal-mining sector was near zero in 2000-01 but was high at 15.7 per cent in 2001-02. In power sector, inflation rate was exorbitantly high at 25.7 per cent in 2000-01 but came down to 11.5 per cent in 2001-02. The government, to mobilise additional resources to cover commercial losses and reduce gross subsidy provided to the sector, regularly increases electricity prices.

Table 18.3: Variability in Inflation Rates Among Different Product Groups, 2001-02

Products/product groups with inflation rate exceeding 10%		Products/product groups with negative rates of inflation	
•	Gram (17%)	Cereals (-1%)	
•	Potatoes (163%)	• Onions (-13%)	
•	Fruits (12%)	Condiments and spices (-1%)	
•	Raw jute (17%)	'Other' food articles (-27%)	
•	Rape and mustard seed (8%)	• Tea (-31%)	
•	Coal (16%)	• Coffee (-16%)	
•	Electricity (12%)	Raw cotton (-15%)	
•	Edible oils (15%)	Groundnut seed (-5%)	
		Mineral oil (-4%)	
		Sugar, khandsari, gur (-4%)	
		Textiles (-2%)	
		Paper and products (-2%)	
		Leather and products (-4%)	
		Rubber and plastic products (-1%)	
		Non-metallic mineral products (-2%)	
		• Cement (-5%)	
		Basic metals, alloys and products (-1%)	
		Other non-ferrous metals (-2%)	

Note: Figures in brackets show inflation rates (rounded).

Source: Prepared from CSO data.

INFLATION IN THE MANUFACTURING SECTOR

Manufacturing sector of the country is heterogeneous and largely consists of a number of different segments. The sector has the largest weight of about 64 per cent in the overall index. Reeling under recessionary conditions, the sector experienced an inflation rate of 4.4 per cent in 2000-01, which came down to just 0.1 per cent in 2001-02. Like other sectors, the variability of inflation rate among various manufacturing sub-groups is remarkable (Table 18.3). In 2001-02, while food products showed an inflation rate of just 0.6 per cent, edible oils recorded an inflation rate of about 15 per cent. However, most of the sub-groups showed an inflation rate of less than 5 per cent. At the same time, a number of sub-groups including sugar, textiles, paper and paper products, leather and leather products, rubber and plastic products, cement, basic metal alloys and metal products, iron and steel and other non ferrous metals showed moderately negative rate of inflation.

Products in the above categories can also be reclassed on the basis of origin of price control, seasonality of the product, nature of use and essentiality from the consumers viewpoint. Accordingly, official price statistics also classify products (figures in brackets being weights) on the basis of above criteria as:

- Administrative items (16.4%)
- Seasonal items (29.6%)
- Raw materials (6.6%)
- Essential commodities (17.6%)

The figures in brackets show their respective weights in the overall index so that together these products command a weight of 70 per cent. In 2000-01, administered items recorded an inflation rate of 29 per cent which declined to only 2.9 per cent in 2001-02 (table 18.4). Seasonal items maintained a low price profile. In 2000-01 prices of raw materials and essential commodities remained between 5.7 per cent and dipped to just 1.5 per cent in 2001-02. Raw material prices remained almost constant in 2001-02 due to recessionary conditions.

Table 18.4: Inflation Rates of Major Product Groups-Alternative Classification, 2000-02

Product Group	Inflation rate (%)		
	2000-01	2001-02	
I. Administered items	29.3	2.9	
II. Seasonal items	1.3	2.7	
III. Raw materials	6.6	0.0	
IV. Essential commodities	5.8	1.5	

Source: CSO data.

SECTORAL CONTRIBUTION TO INFLATION

As a further step to analysis of inflation, it is useful to see how individual sectors or product groups contribute to inflation. Such an analysis is required to design an appropriate price policy as built into the various tools of macroeconomic management. All the sectors do not contribute equally to inflation. As seen in **Table 18.3**, certain sectors experience a high rate of inflation while others experience negative rate of inflation or falling prices. Overall rate of inflation, as stated earlier, is the result of these inflationary trends in the opposite directions.

Contribution of a particular product group to overall inflation depends on its own rate of inflation relative to overall inflation rate and the weight commanded by it in the overall index. The higher the weight and its own rate of inflation, the higher is the contribution to inflation. If in a particular year, the prices in a particular sub-group remain constant, its contribution to overall inflation would be zero irrespective of the weight assigned to it. As shown in Table 18.2, during the two-year period 2000-02, the contribution of primary product group and manufacturing products to overall inflation has widely fluctuated while that of the energy products sector was relatively stable. It is interesting to see that in the year 2001-02 the manufacturing sector, which commanded a weight of about 64 per cent in the overall index, contributed only 2 per cent to overall inflation whereas the other two sectors with much smaller weights, contributed maximum to inflation. This decomposition clearly indicates the points at which anti-inflationary policy should be directed.

Within these broad sectors, it is interesting to see how different product groups contribute to inflation. Table 18.5 shows the product sub-groups which contributed more than 5 per cent to overall rate of inflation. This contribution, alongwith their weights, shows their status or potential as generators of inflation. However, the per cent contribution swings fast and changes direction from year to year.

Table 18.5: Product Segments Contributing more than 5 per cent each to Overall Inflation, 2001-02

Product group		Weight in the overall index	Contribution (%) to overall inflation
1.	Food articles (primary)	15.4	49.9
2.	Fruits and vegetables	2.9	37.2
3.	Milk	1.5	16.5
4.	Eggs, meat and fish	4.4	18.3
5.	Sugarcane	1.3	7.0
6.	Mineral oil	1.7	20.5
7.	Electricity	5.5	62.7
8.	Edible oils	2.8	19.5
9.	Chemicals and products	11.9	7.4
10.	Machinery and machine tools	8.4	12.7

Note: Per cent contributions add to more than 100 as there exist other product groups with negative contribution.

Source: CSO data.

In the alternative classification, administered items, seasonal items, raw materials and essential commodities contributed 47.9 per cent, -0.2 per cent and 20.5 per cent respectively to inflation (Table 18.6). Keeping in view the fact that a number of administered items like petroleum and food grains serve as inputs in a large number of other industries, inflation in the administered-price product groups induces cost-push inflation in other industries. It should, therefore, be evident that in the current scenario government itself is a substantial contributor to inflation on the production side. This impact is greatly offset by falling prices in other product segments. Table 18.6 lists the product groups the inflation contribution of which is less than -5 per cent in the year 2001-02. Negative contribution to inflation means that prices of these groups fell substantially to relieve the pressure on overall inflation by 5 per cent or more. Sectoral contribution to inflation also points to the fact that these product segments are among those most severely hit by the industrial slowdown. Before these sectors are engulfed by industrial sickness; it is necessary to provide support to them particularly through fiscal policy, qualitative credit controls and industrial policy. While sharp decline in mineral oil prices is attributed chiefly to fall in international prices, other segments face low demand in the domestic market.

Table 18.6: Product segments contributing less than -5 per cent to overall inflation 2001-02

Product group	Weight	Contribution (%) to overall inflation
1. Cereals	4.4	-5.9
2. Raw cotton	1.4	-15.2
3. Mineral oil	7.0	-35.2
4. Sugar	3.6	-12,2
5. Textiles	9.8	-12.1
6. Cement	1.7	-5.9

Note: Weights are approximated to the first place of decimal. (Again these contributions add to more than 100 as a number of product items not covered in these categories made negative contribution to inflation).

Source: Prepared from CSO data.

GENERAL FACTORS FOR LOW-INFLATION ENVIRONMENT

There are different sets of factors behind price movements in individual and specific sectors. However, it is possible to count some general factors responsible for the low inflation scenario in the economy. These factors are as follows:

- Global recession;
- Import liberalisation and gradual fall in custom duties;
- Increased competition in the wake of economic liberalisation, privatisation and globalisation resulting in larger domestic supplies;
- Controlled rate of growth of money supply and credit;

- Massive borrowing operations of the government causing transfer of purchasing power from public to the government;
- Huge food grain stocks maintained by the government. The stocks held by the FCI were about 51 million tones in October 2002; and
- Rising level of unemployment in various population segments reducing the level of demand.

MONETARY EXPLANATION OF RECENT PRICE SITUATION

Though inflation is the result of rates of inflation of various constituent sectors and sub-sectors, the rates being determined by sectoral demand, supply, taxation and competitive factors, yet it is customary to analyse inflation in terms of certain other macroeconomic variables. One such leading variable is the supply of money defined in Chapter-17. Many elements of the theory of inflation are explained in Chapter-10, which provides theoretical background to this section.

In standard theory, inflation results when the rate of monetary expansion (which determines aggregate demand) exceeds that of gross domestic product (which means aggregate supply). Traditionally, the relationship is written as:

$$p = (m - y) + v$$

Where P = inflation rate; m = money growth; y = GDP growth and v = rate of change in velocity of money. Inflation rate, thus, is money supply growth netted by output growth. v is added to the right hand side as increase in velocity, adds to the force of demand and hence contributes to inflation. Alternative measures of money can be taken to study their correlation with the inflation rate. The correlation is expected to be high and positive if government intervention and market imperfections are kept at a minimum. Further, the relation is often lagged rather than instantaneous. The length and variability of the lag changes from time to time and requires detailed econometric exercises for determination of their empirical values.

If we take the post-reform data (1994-2001) on the growth of M₃ (as a measure of money supply) and wholesale price index, the co-efficient of correlation between the two variables works out to be 0.71, which is reasonably strong. The correlation between M₃ and GDP comes to about 0.2, which is quite weak. It means that for monetary analysis of inflation, it is M₃ rather than M₄ which is more relevant factor of inflation. From this statistical exercise it may be inferred that money supply changes in India are associated more with price level rather than changes in output. This points to a case for monetary restraint for price stability.

The relationship between money supply growth, GDP growth and inflation in recent years is shown in **Table 18.7.** Inflation rates do not precisely correspond to the difference between the growth rates in M, and GDP. The divergence is mainly due to changes in velocity of money, market, infrastructure, government controls over the prices of a number administered items.

4.0

5 4

4.9

Year	Money supply growth (M ₃)	GDP growth (1993- 94=100)	Inflation rate (1)
1998-99	19.4	6.5	5.3
1999-2000	14.6	6.1	6.5
2000-01	16.7		

16.7

11.2

Table 18.7: Growth Rates in Money Supply, GDP and WPI, 1998-2002

Source: Govt. of India, Economic Survey, various years.

INFLATION TARGETING

2001-02

In view of the close link between money supply and the rate of inflation, monetary policy has inflation control as one of its major objectives. A number of countries like New Zealand, Australia, Canada, Finland, Israel, Spain and the UK conduct monetary policies with what is popularly known as inflation targeting. Under inflation targeting, a central bank designs and conducts monetary policy in such a manner as to achieve a publicly announced or committed rate of inflation. Monetary policies of a number of countries seek to keep the inflation rate within a precommitted band. Inflation targeting contributes to the stability of business environment and cools down inflationary expectations and speculative behaviour in the economy.

In recent years, there has been a debate whether RBI should be permitted inflation targeting. The controversy tends to heat up in times of rising or high inflation but in the present phase of low inflation, the debate has a low profile. However, a reasonable rate of inflation, say upto 5 per cent, is generally considered desirable to maintain momentum of private investment and profitability prospects promising. Inflation targeting makes sense even in periods of low inflation as it may seek to raise the rate through various monetary policy instruments to an appropriate level to maintain proper investment and profitability environment. RBI, itself on a number of occasions, has desired a mandate from the government to keep the rate of inflation within a specified band. The government, in its various policy documents, considers an inflation rate of 4-6 per cent desirable. Tarapore Committee on Capital Account Convertibility recommended a mandated rate of inflation of 3-5 per cent for the period 1997-2000. Nevertheless, there appears to be a wide and growing consensus on 5 per cent as the desirable rate of inflation in the typical Indian business environment. RBI commands substantial power to target the desired or mandated rate through various monetary policy instruments designed to change the supply of money and credit.

Inflation targeting, however, is not a simple matter. It requires certain pre-requisites for effective results. Some of these are the following

- Central bank should not be constrained to finance government budgets.
- It should have a good variety of effective and market-related instruments.

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- There should be a high degree of transparency in central banking operations to keep speculation and inflationary expectation away.
- Central bank must possess a comprehensive and reliable information base to forecast inflation.
- Central bank must be accountable so that its actions and intentions command a respectable degree of credibility.
- Central bank must enjoy a high degree of autonomy.

Inflation targeting, though greatly desirable, is difficult to adopt in view of some formidable obstacles in the way of its adoption. A few of these are the following

- The debt management function is inextricably interwoven with monetary management.
- Under the present set-up, autonomy for the RBI appears to be a far cry.
- Financial markets are fragmented, imperfect and not fully competitive.
- Monetary transmission channels are not fully established.
- The information and statistical system in the country is far from satisfactory.

ROLE OF THE GOVERNMENT IN INFLATION MANAGEMENT

Monetary and fiscal policies continue to be the chief instruments of inflation in the country. The measures contemplated under the policies are revealed in plan documents, government budgets, monetary and credit policies and a series of economic reform measures. During the period of economic reforms, there has been gradual dismantling of the structure of price controls on a wide range of industrial and other products and prices have been left to be determined competitively through the market mechanism. Recently, administered price mechanism was dismantled for all petroleum products (except LPG and kerosene) with effect from April 1, 2002. However, the government continues to keep control over agricultural prices in view of wide public interest. Government controls the price of wheat, rice and sugarcane by announcing their procurement or minimum prices from season to season and through buffer stocks and public distribution system. Government also controls the prices of nitrogenous fertiliser (urea) which involves heavy subsidy. Further, government affects the import prices of a large range of products by varying tariffs and import volumes. Changes in import volumes affect domestically available products big affecting their prices. Not only that, prices of pharmaceuticals is subject to various direct and indirect price and quality controls. All these factors are in addition to the power of the government to affect costs and prices through changes in rate of interest and indirect taxation, notably excise duties. As already pointed out above, the items the prices of which are administered by the government, command a weight of about 16.3 per cent in the wholesale price index. Most of these items are 'sensitive' or produced in the public sector.

In spite of the above factors, the government has no separate or exclusive inflation policy. As already pointed out above, price stabilisation is one of the central objectives of various macroeconomic policies but the government has no specific sectoral or macro targets of inflation.

A low rate of inflation is a healthy sign for the economy and counted among its strong fundamentals. It creates a number of favourable opportunities for the business sector, which must be appropriately tapped. A low (but not very low) rate of inflation makes a positive contribution to business environment in the following ways:

- It keeps production costs low so that firms can remain competitive in both domestic and foreign markets.
- It creates favourable environment for achieving a low rate of interest which in turn means low cost of capital.
- It reduces business risk facilitating investment.
- It puts no adverse pressure against exchange rate of the domestic currency. Stable exchange rate is essential for trade promotion.
- It helps the government to keep expenditure (and hence fiscal deficit) in check. This promotes fiscal stability.
- It facilitates better business planning and forecasting.
- It helps in maintaining an environment for the growth of consumer demand.
- Through low production costs and exchange rate stability it provides a good opportunity to firms to push exports which can alleviate balance of payments problems of the country.

Inflation management requires continuous monitoring of the economy and the factors of inflation. The macroeconomic and sectoral policies alongwith trade volumes have to be appropriately controlled to keep the domestic supply position vis-à-vis demand comfortable.

CONCLUSION

Inflation affects the prices of both consumer and industrial goods. It also impacts rate of exchange, imports and exports, structure of rates of interest and a number of other related variables which in turn, affect the competitiveness of firms. Changes in the inflationary environment warrant corresponding corporate response and adjustment. Firms must be able to analyse changes in the inflationary environment, determine their nature of impact and decide the design of changes in adjustment strategy.

Key Terms

Balance of Payments

Fiscal deficit

Velocity of money

Central bank

GDP

Wholesale Price Index (WPI)

Consumer Price Index (CPI) Inflation targetting

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Long Questions

- Discuss the current state of inflationary environment. What is the significance of monetary factors in this regard?
- 2. Make a sectoral analysis of the general rate of inflation in the country. Identify the sectors that have positive and negative contribution to the over all index. What is the significance of sectoral analysis for a business manager?
- 3. What are administered prices? How do these contribute to overall rate of inflation?
- 4. What is the link between monetary expansion and inflation? How does inflation result from comparative growth of money supply and GDP?
- 5. What is inflation targeting? What is its rationale? Do you think it is advisable for the RBI to do inflation targeting on a regular basis?

Short Questions

- 1. How is Consumer Price Index used to measure inflation in the country?
- Why do inflation rates based on wholesale and consumer price indices diverge?
- 3. How is inflation in the primary sector linked to inflation in the manufacturing sector?
- 4. Make a list of factors accounting for the low-inflation environment during 2000-03.
- 5. Briefly describe the role of government in inflation control in the present times.
- 6. How does low inflation contribute to overall business environment?

Practical Assignments

- 1. In 2002-03, manufacturing sector commanded a weight of 63.75 per cent in the production of all commodities but contributed 46.7 per cent to inflation. Examine this position and prepare a critical note for discussion.
- 2. Fuel, power, light and lubricants sector commanded a weight of 14.2 per cent in the production of all commodities in 2002-03 but contributed 29 per cent to overall inflation hold a group discussion bringing out the major factors responsible for this situation.
- 3. Keeping in view the state of macroeconomic environment for the current year, prepare a report on the inflation outlook for the next year. Discuss the report in the class.
- 4. Organise a symposition on The Impact of Government on the Inflationary Environment.

THE MRTP ACT AND THE NEW COMPETITION LAW

Chapter Outline:

- The Background
- Objectives and Coverage of the Act
- The Enforcement Machinery
 - □ The MRTP Commission
 - Composition and Qualifications of the Members
 - Powers of the Commission
 - Limitations on the Commission's Powers
 - Compliance of the Commission's Orders
 - Functions
 - □ Director-General of Investigation and Registration
 - The Investigation Function
 - The Registration Function
 - The Central Government and the Supreme Court
- Monopolistic Trade Practices (MTPs)
 - □ The Concept and Types
 - Gateways of Public Interest
 - □ Regulation of MTPs
- Restrictive Trade Practices (RTPs)
 - □ The Concept and Types
 - Gateways and Balancing Provisions
 - ☐ The Control Mechanism for RTPs
- Unfair Trade Practices (UTPs)
 - Concept and Types
 - Control of UTPs
 - Division of Undertakings and Severence of Inter-connection
 - Gradual Dilution Leading to the Repeal of the Act
- The Competition Act, 2002
 - □ Coverage and Applicability
 - Prohibition of Anti-Competitive Agreements
 - Prohibition of Abuse of Dominant Position
 - □ Regulation of Combination's
 - ☐ Establishment of Competition Commission
 - Investigation of Combinations
- Conclusion

THE BACKGROUND

Economic theory tells us that monopolies restrict output and lead to higher prices under standard conditions. In practical life, monopolies restrict competition and consumer choices, are detrimental to economic growth and lead to consumer exploitation. In the long run, they inhibit research and development, breed inefficiency, promote uneconomic use of national resources and accentuate concentration of wealth and income in the society.

A number of countries have anti-monopoly or anti-trust legislation to control and regulate monopolistic tendencies and promote competition in various areas of business activity. In India, the Monopolies and Restrictive Trade Practices (MRTP) Act was passed in 1969 and came into force in 1970 (June 1) with the establishment of the MRTP Commission. The Act was later amended in 1974, 1980, 1982, 1984 and 1991 to remove inconsistencies, make it more effective and for making adjustment to changing economic policy. The Act was in conformity with Section 39 of the Directive Principles of State Policy which directs the State to ensure that 'the operation of economic system does not result in the concentration of wealth and means of production to the common detriment'.

With the passing of the new Competition Act, 2002, the MRTP Act, 1969 has been repealed and MRTP Commission dissolved. However, in spite of that the section on MRTP Act has been retained due primarily to the fact that most parts of the repealed Act provide foundation and conceptual understanding for the new competition act 2002. All the cases pertaining to monopolistic and restrictive trade practices under the MRTP Act have been transferred to the Competition Commission of India constituted under the new Act and shall be adjudicated by the commission in accordance with the provisions of the repealed MRTP as it this act has not bee repealed. As the number of such cases is large, the provisions of the MRTP Act will remain in force in spite of the fact that it has been repealed.

The MRTP Act was necessitated in view of a high degree of concentration of economic power in the country discovered by a few countries constituted for the purpose. As early as in 1964, Mahalanobis Committee (under the Chairmanship of P.C. Mahalanobis) reported a high level of producer concentration in a wide range of producer and consumer goods industries. Similar concentration was found in asset ownership. In 1965, Monopolies Enquiry Commission (set up by the Government (under the Chairmanship of K.C. Das Gupta) in its Report found that in 62 per cent of the total 1380 products, top three firms accounted for three-fourths of the total output in the respective product lines in the organised sector. In this product group, monopoly (only one producer) was found in each of the 425 products, duopoly (only two producers) in each of 225 products and only three producers in each of 160 products. The Commission further found that top 75 business houses at that time (each having total assets exceeding Rs. 5 crore) accounted for 47 per cent of the total assets and 44 per cent of the total paid up capital of the private corporate sector.

OBJECTIVES AND COVERAGE OF THE MRTP ACT

The Act, before amendments, had the following objectives:

Control and regulation of concentration of economic power to the common detriment

- Control of monopolies and monopolistic trade practices; and
- Prohibition of restrictive trade practices.

In the course of subsequent amendments, the objectives of the Act have been modified. In 1984, the Act was extended to cover unfair trade practices (defined later). In the light of the new liberalised industrial policy announced in 1991, the Act was further amended and the asset limit of MRTP companies was scrapped. This greatly diluted its initial objective of preventing concentration of economic power in private hands. By the time of repeal of the Act, its main objectives boiled down to controlling and regulating monopolistic, restrictive and unfair trade practices.

To a limited extent the Act also regulated mergers and acquisitions. There was a misconception that the Act applies only to large undertakings. In fact, for meeting the above objectives, it applied to all private business entities big or small, irrespective of their corporate form and even individuals. The provisions of the Act are were addition to and not in substitution to any other law having similar or related objective, in force. MRTP Act was applicable even where Company Law Board or SEBI is available for redressal.

Since 1991 (as per government notification dated September 27) the following categories of entities were exempted from the provisions of the MRTP Act:

- Undertakings owned or controlled by the government or a government company, which are
 engaged in the production of arms and ammunition, allied items of defense equipment,
 defense aircrafts and warships, atomic energy, minerals for atomic energy, currency and
 coins.
- Trade Unions and other associations of workmen or employees formed for the purpose of their protection.

Thus, all public sector undertakings except those mentioned above, private undertakings, cooperative institutions and financial institutions including commercial banks were covered by the Act. Prior to September 1991 notification, the Act did not apply to (a) undertakings owned or controlled by the government or a government company or a corporation (not being a company) established under any central, state or provincial Act; (b) Undertakings engaged in an industry the management of which was taken over by a person or body of persons authorised by the central government under a law (c) undertakings owned by a cooperative society formed and registered under an Act relating to cooperative societies and (d) financial institutions, in addition to the above two categories (post 1991). The Act did not apply to J&K. Major sections of the MRTP Act and their provisions are provided in Box 19.1 at the end of the Chapter.

THE ENFORCEMENT MACHINERY

The machinery for the enforcement of the MRTP Act consisted of the MRTP Commission, the Director-General of Investigation and Registration (DGIR) and, in a wider scope, it included central government and the Supreme Court as well. These institutions are described in the following sections.

THE MRTP COMMISSION

The Commission was a quasi-judicial body formed under the MRTP Act. The Act conferred wide powers on the Commission. The composition, powers and functions of the Commission were as follows:

Composition and Qualifications of Members

The Commission consisted of a Chairman and 2-8 members appointed by the central government on a five-year term. The qualifications of the Chairman and the members are listed in **Table** 19.1. The Chairman and the members could be re-appointed but their total tenure in the Commission

Could not exceed 10 years. The Chairman or a member could be removed from his position if it was established that he had abused his position or had acquired financial or other interests prejudicial to his functions.

Table 19.1: Qualifications of the Chairman and the Members of the MRTP Commission

Chairman	A person qualified to be a judge of the Supreme Court or a High Court.
Member	No formal qualification. A person of ability, integrity and standing having adequate knowledge and experience in law, commerce, accountancy, industry, public affairs or administration.

Powers of the Commission

The powers of the commission were as follows:

- 1. Power of Enquiry: The Commission could enquire into any monopolistic, restrictive or unfair trade practice on the basis of:
 - a) Receipt of complaint from a consumer, a trade association or a registered consumers' association recognised by the central government; or
 - b) A reference received from the central government; or
 - c) An application received from the Director-General Investigation and Registration (DGIR) or,
 - d) The Commission's own information or knowledge.

Enquiry in case of monopolistic trade practice could be started only on the basis of (b), (c) or (d) above. For the purpose of enquiry, the commission had powers of a civil court under which it could summon and examine witnesses, receive evidence on affidavits, call public records from any court or office and order appearance of parties connected with a case. Commission proceeds were deemed to be judicial proceedings.

Power to Call Persons and Records: The Commission could issue summons and warrants
throughout India and could enforce attendance of witnesses. It could require any person to
produce documents or information relating to a trade practice for the purpose of the Act.

It could even authorise other persons to search any premises and seize related documents that could possibly be destroyed or altered.

- 3. Power to Grant Temporary Injunction: Till a case pertaining to a trade practice was decided, the Commission could restrain any such person or entity from carrying out such further practice. Such order could be issued at any time during an enquiry.
- 4. Power to Order Compensation and Damage: If any monopolistic, restrictive or unfair practice was proved, the Commission could award compensation for loss or damage caused to the aggrieved party. It must be emphasised that the nature of such compensation was different from a penalty or punishment awarded by a civil court.

In addition to the above, the Commission could allow the contending parties to modify their trade practices within a reasonable period of time. In case of contempt, it had the same power as that of a High Court to grant punishment. After an enquiry was over, the Commission could give a verdict of any of the following types:

- That the practice in question would be discontinued and would not be repeated in future (called cease and persist order).
- That the agreement relating to the trade practice shall be void or shall stand modified as per the commission's order.

The Commission could review its own orders if there was a material change in the facts of a case or if a new fact came to the notice of the Commission having a bearing on the outcome of the case.

Limitations on the Commission's Powers

The Commission's powers were however not unlimited or unbridled. Some of the main limitations on the Commission's powers were the following:

- The Commission could not restrict or alter the rights, direct or indirect, attached to a
 patent. Nor could it order in respect of conditions attached by a patent holder to his
 licensee in the country.
- The Commission could not affect a person's or firm's right to export or pass orders relating to any trade practice exclusively relating to exports.
- Commission's orders were subject to the relevant provisions of the High Court judgments.
- It could pass 'cease and desist' orders and could award compensation in case of proved losses but could not award penalties or punishments for objected trade practices.

Compliance of the Commission's Orders

The Commission could pass general orders for universal application or specific orders with reference to a particular party or trade practice. Orders of the Commission were enforceable in the same way as the order of decree of a court. If the orders of the Commission were not executed, the Commission could get it executed through the court in the jurisdiction of which the individual or business unit was located. For the compliance of its orders, the Commission could authorise and

depute any of its officers or an officer of the DGIR to investigate whether its orders were being complied with. The Commission then took action on the basis of the investigation submitted by the authorised officer. The action could take any of the following two forms:

- The commission might refer the matter to a court of sessions, which has the power to impose penalties and punishment.
- It may provide for 'compounding' of offences. Compounding is the payment determined by the Commission and payable by the erring party against which the Commission agreed to drop the matter for further action. Compounding is an opportunity given by the Commission to the party to save the cost and time of court proceedings.

Contravention of the orders passed by the Commission later carried deterrent punishment. The Commission was also empowered to punish for its contempt.

Functions

Many functions of the Commission were implicit in its powers summarised above. At the cost of some repetition, the main functions of the Commission may be listed as under:

- To conduct enquiries and hear cases relating to monopolistic, restrictive and unfair trade practices.
- To advice the government in matters relating to division or severance of undertakings to restrict concentration of economic power.
- To give report to the central government on cases relating to monopolistic trade practices for final orders of the government. (In such cases, the Commission could grant temporary injunctions and compensation as pointed out above, but final orders were given by the government on the basis of the Commission's report. The Commission, however, had wide powers in respect of restrictive and unfair trade practices.)

DIRECTOR-GENERAL OF INVESTIGATION AND REGISTRATION (DGIR)

DGIR, as part of the enforcement machinery, was appointed by the central government under the MRTP Act. The government might also appoint additional, joint, deputy or assistant Directorgenerals as it may consider fit. The Director-General had powers and functions as per provisions of the MRTP Act and worked independent of the Commission. The Director-General was neither appointed nor controlled by the Commission.

The Investigation Function

DGIR, at the behest of the Commission, had the duty to carry out a preliminary investigation into a complaint regarding a trade practice. It could also conduct an investigation on its own and apply to the Commission for enquiry. The DGIR or any person authorised by it to make the preliminary enquiry enjoyed the same power as that of an 'inspector' under Section 240 or Section 240A of the Companies Act. In this regard, the DGIR had the power to call the required information. He had the right to appear in the course of any enquiry before the Commission. He represented the Commission before the Supreme Court or a High Court.

The Registration Function

Under the MRTP Act, all agreements that related to restrictive trade practices had to be registered with the DGIR if at least one of the parties to the agreement carried out its business in India. However, the agreements which were permitted by an existing law or by the government or in which the government itself was a party were exempted from registration requirements on grounds of public policy. The details of the registrable agreements received by the DGIR are maintained by it in a register.

DGIR scrutinised the details of each agreement received for registration. Discrepancies or omissions, if any, were got corrected by the concerned parties On registration, each document was endorsed with (a) date of registration, (b) serial number and page number on which the entry is made in the register and (c) seal and signature of the DGIR. The register (except a special section) was kept open to public inspection (against a nominal charge) in the interest of transparency and general information. Any member of the public was free to move court against a particular agreement, in the public or own interest.

Any party could apply to the DGIR for exemption from registration on the ground that the agreement has little economic significance. It might also apply for inclusion of a particular part of the agreement in the 'special section', which was not open to the public. Sufficient reason, however, had to be given in this regard. DGIR or the MRTP Commission could start an enquiry on the basis of an agreement registered or received for registration.

The Central Government and the Supreme Court

The central government and the Supreme Court lay at the apex level of the enforcement machinery. The central government itself appointed the MRTP Commission and the DGIR as the central parts of the machinery. The power on the passing of final orders with regard to the monopolistic trade practices referred by the Commission lay with the central government. The coverage of the Act was extended by the government from time to time. In relatively rare cases, the matters on division of undertakings and severance of interconnected undertakings to check concentration of economic power referred to it by the Commission were decided by the central government.

The Supreme Court, the High Court and the courts of sessions might also be regarded as part of the enforcement machinery. The MRTP Commission made orders in consonance with the Supreme Court and High Court judgments on relevant areas. Courts of sessions were occasionally involved in the execution of the commission's orders in case of non-compliance by the concerned parties. Further, the Supreme Court decided appeals against the orders of the Commission or the central government if these raised substantial questions of law.

MONOPOLISTIC TRADE PRACTICES

THE CONCEPT AND TYPES

Under the MRTP Act [Section 2(i)], an MTP was defined as a trade practice which had (or likely to have) any of the following effects:

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- Limiting or controlling, supply or distribution of goods or services thereby maintaining their price at unreasonable levels (see Box 19.2 for definitions).
- Limiting technical development or capital investment or allowing the quality or goods or services to deteriorate.
- Unreasonably preventing of restricting competition.
- Unreasonably increasing cost or production or charge for services.
- Unreasonably raising the prices of goods or services.
- Unreasonably increasing profits on production, distribution or supply of goods or services.
- Resorting to unfair or deceptive means to reduce or prevent competition in goods or services.

Such practices were seen as serious forms of restrictive practices.

GATEWAYS OF PUBLIC INTEREST

Gateways referred to circumstances under which reasonable trade practices would be allowed. All MTPs in the eyes of the law were **per se** bad, i.e. prejudicial to public interest. This clause was important. If a trade practice was not prejudicial to the public interest, it could be exempted from the definition of MTP. The following types of practices under the Act were not prejudicial to the public interest:

- Practices that were expressly authorised by an enactment.
- Practices that were permitted by the central government.

The restrictive practices that were permitted by the government related to strategic goods, essential supplies or were the ones in which the government itself was a party.

BOX 19.1

Some Basic MRTP Definitions

- 1. Trade: Trade, business, industry or profession relating to production, supply, distribution or control of goods and provision of services [Section 2(s)].
- 2. Trade Practice: Any practice in relation to carrying on any trade including any activity, which controls or affects price or method of trading. Practice need not be repetitive, even a single or isolated activity is covered under the definition [Section 2(u)].
- 3. Goods: As defined in the Sale of Goods Act, and includes (a) products manufactured, processed or mined (b) shares ands stocks including those before allotment and (c) imported goods in relation to goods supplied, distributed or controlled in India. Category (b) was included after 1991 amendment [Sec. 2(e)].
- 4. Services: A service which is made available to potential users, including banking, finance, insurance, real estate¹, chit funds, transport, processing, energy supply, boarding/lodging, entertainment, government services and information supplied against a charge. Sovereign government services (like defense, police) are excluded. [Sec. 2(r)].

¹.Included in 1984 amendment.

REGULATION OF MTPS

The MRTP Commission could make an enquiry on the basis of any of the following:

- A reference received from the central government regarding the existence of such a practice.
- An application received from DGIR in this regard.
- The Commission's own information or knowledge.

The Commission made a full enquiry and submitted the report to the central government, which alone had the power to take a decision on such a practice. However, the Commission had the power to order compensation for the loss incurred due to such a practice. The government, in the extreme judgment, could order discontinuance or prohibition of the practice or cancel the whole agreement containing such a practice. The other forms that the government decision could take might be any of the following:

- Regulating production, supply or control of goods or services and fixing terms of sale including price and supply.
- Fixing or regulating quality standards for goods and services.
- Declaring some parts of the agreement unlawful and cancelling the whole or part of the agreement.
- Regulating profits arising from the trade practice.

The government's order in an MTP case had to be completed within 30 days and the DGIR had to report such compliance within 90 days of the issue of orders. The MTP provisions were applicable to any undertaking. Prior to 1984 Amendment these were applicable only to those undertakings which controlled more than 50 per cent of goods or services of any particular type in question.

RESTRICTIVE TRADE PRACTICES

THE CONCEPT AND TYPES

MRTP Act had detailed provisions with regard to the control of RTPs. An RTP under the Act had defined to be the one that had the effect of preventing, distorting or restricting competition in any manner. An RTP in particular had the effect of:

- Obstructing the flow of capital or resources for production; or
- Imposing unjustified costs or restrictions on consumers with regard to the availability of
 goods or services by manipulating prices or conditions of delivery or supplies to market.
 Some of the common practices deemed to be RTPs were the following:
- Restriction on Buying and Selling. These may be in the form of limiting persons to whom
 the goods may be sold or from whom these may be bought.

- *Tie-in Sales.* These force a person, as a matter of compulsion, to buy a product (for which he is not a customer) alongwith the product that he wishes to buy (e.g. requiring a customer to buy a shaving blade alongwith cream).
- Exclusive Dealership Agreement. The agreement requires the dealer of a particular product not to deal in another product (usually of a rival). It also includes exclusive dealership rights to a person(s) in a particular geographical location (creating local monopoly). Sometimes such a practice was allowed on the ground of efficient after-sale or customer service or economic viability of business. Exclusive product dealership was also upheld in case of franchises.
- Collective Price Fixation and Tendering. It is the practice of collecting agreement among individuals or business units to collectively buy or sell a product or tend only at mutually agreed price and terms. In oligopoly, firms may collude and resort to this practice as a 'cartel' to eliminate competition between them and charge a monopolistically high price. Alternatively, a trade association may ask its members to charge a collectively agreed price and exclude or boycott a member for non-compliance. In such cases, all sellers quote identical prices.
- Discriminatory Dealing. Under this practice, a seller discriminates between different buyers, charges different prices and imposes different terms of sale (including discounts, trade credit etc.) on the basis of the size of the order. Under the practice, a wholesaler may give a larger discount to a retailer whose order is larger. Such a practice would make larger retailers more competitive than smaller retailers and competition no longer remains fair. However, small differences in discounts or those which don't affect competition in any significant manner, may not be covered under discriminatory trading. Such practices are very common in contemporary trade.
- Resale Price Maintenance. This practice is found to prevail in dealings between traders at different levels in the distribution chain. Under this practice one dealer (say a distributor) requires another buying dealer (say a wholesaler) not to sell the product 'below a certain price' or 'above a certain price'. Any such agreement was void under the Act, unless specifically allowed by the MRTP Commission on a valid ground. This practice is different from 'direct price maintenance' under which a manufacturer sells his products at a fixed price through its own retail outlets. 'Minimum resale price maintenance is more serious and was totally prohibited under the Act The manufacturer could however recommend maximum resale price' (MRP).
- Output or Supply Restrictions. Such agreements seek a limit, withhold or restrict the output
 or supply of a product or allocate any particular market for their disposal. Sometimes area
 restrictions are justified on such grounds as after-sale service, continuous contact with the
 customer or limited distribution network of the manufacturer.
- Manufacturing Process Restrictions'. Such restrictions are usually imposed by one manufacturer on the other when they are in some sort of relationship like licensing, franchising, co-production arrangement, sub-contracting, buy-back, joint tendering, buy-back arrangements, market sharing arrangement, joint venture or any other type of collaboration. Such an agreement may require a manufacturer not to use a particular type of capital equipment, technology and production process or to produce a product only up to a limited quantity

using a particular process or technology. Such agreements restrict output and competition.

- Price Control Agreements. Such agreements seek to sell products at prices which would destroy competition and competitors. This may be done through collusive price fixing, predatory pricing or dumping. Selling products at prices much below the normal market price or even the cost of production are examples of such a practice. However, giving price discounts in competition is not covered under the practice.
- Collective Bidding. This practice is very common but very difficult to prove. In this practice
 bidders at an auction collude rather than compete. In collusion, the bidders pre-plan not to
 let the bid price beyond a particular price or let the auction go in favour of a particular
 individual or party.
- Any other Agreement. The above list being not exhaustive, the government under the Act, could, on the recommendation of the MRTP Commission, declare any other practice as restrictive. The practice might be declared restrictive under a notification. The purpose of this provision was to enable the government to control any such restrictive practice which may come in vogue in future.

GATEWAYS AND BALANCING PROVISIONS

Restrictive trade practices falling in any one of the following categories were exempted from the definition of the RTPs:

- Agreements that were not against the public interest.
- Agreements that satisfied the 'rule of reason'. Under this rule, a practice might be allowed keeping in view the balance between negative effects of restrictive agreement and the circumstances under which the restriction appears normal.
- Agreement in which reasonable restriction had to be provided to prevent injury to the
 public (persons or their premises) resulting from use, consumption or installation of the
 products.
- Restrictions the withdrawal of which was likely to cause denial of certain benefits to the
 public (e.g. restrictions regarding storage or transportation of poisonous or dangerous
 products.
- Restrictive practices that had to be undertaken in defence against such practices of rivals
 (for example, discriminatory discounts of a supplied product might be justified on the
 ground that such practice was widely prevalent among the competitors.
- Restrictive practices that might enable a buyer to negotiate better terms with a supplier who
 controlled a dominant part of trade in the market. The latter was likely to exploit the buyer
 by virtue of his dominant position and the restrictive practice on the part of the buyer
 might offset exploitation.
- Restrictive practices the withdrawal of which might hamper exports or create serious, unemployment.
- The restriction which was secondary or allied to an earlier one allowed by the MRTP Commission on the ground of public interest.

- Practices, which were covered by the 'principle of deminimis'. Under the principle, a practice
 is exempted if it has little adverse impact on existing competition.
- Restrictions, which were specifically allowed by the government. For example, if government
 controlled the price of a product under some existing law (e.g. Drug Price Control Order),
 it might attract the provisions of the Act.
- Restriction, which is necessary for the security of the country or for maintaining the supply
 of essential goods and services under Essential Commodities Act.
- Resale price maintenance per se bad and prohibited might be permitted by the Commission
 in case of certain products if the Commission was convinced that the removal of the
 condition would cause any one or more of the following:
 - a) deterioration in the quality of goods to the detriment of the public interest, or
 - b) increase in retail price would increase hurting the consumer interest; or,
 - c) the necessary supplies would be reduced or stopped injuring the consumer interest.

In addition to the above exemptions, the MRTP Commission may allow any restrictive practice that it considered reasonable after weighing the circumstance under which it prevails and its effect on competition or public in general.

THE CONTROL MECHANISM FOR RTPS

As pointed out in the preceding sections relating to DGIR, all agreements containing any of the restrictive clauses mentioned above had to be registered with the DGIR within 60 days of the agreement giving details of the parties concerned and the terms of agreement. The registration requirement applied to any firm, trust, association or individual. The registration was for the information and database of the DGIR as well as the members of the public. Registered agreement was held void only after a complaint was received, enquiry conducted and 'cease and desist' orders passed. The registration, by itself was no positive or negative reflection on the agreement (see the preceding section on the registration function of DGIR). The registration requirement motivated the concerned parties to avoid any restrictive clauses in the agreement and thus served as a deterrent.

Investigation

The MRTP Commission could initiate an enquiry into a particular restrictive trade practice on the basis of any of the following:

- a) A complaint received from a consumer or a consumer organisation; or,
- b) A reference made by the central or state government; or,
- c) Application received from BIFR; or,
- d) Its own knowledge or information.

The Commission could start an enquiry irrespective of the fact whether the RTP in question was registered or not. The Commission can even investigate an expired agreement and deliver

judgment so that the same or some other party might not resort to the practice again. The Commission, in its enquiry, heard all the parties concerned and its decisions fell into one of the following categories:

- The practice might be allowed if it was found not prejudicial to the public interest; or
- 'Cease and Desist Order' might be passed if it was found prejudicial to the public interest; or,
- The agreement might be modified as per orders of the Commission;
- Proceedings may be dropped if the party on its own promised to discontinue, altered or not to repeat the practice in future.

UNFAIR TRADE PRACTICES

THE CONCEPT AND TYPES

UTPs were added to the MRTP Act in its 1984 amendment as Part-B to Chapter V. It was done on the recommendations of the Sacher Committee Report in order to protect the consumer from a wide variety of unfair trade practices, which exploit the consumers. The practices are also mentioned in the Consumer Protection Act, 1986 The Act identified the following categories of UTPs.

- False or Misleading Representation. It could be in form of a statement, (written or oral) or visible presentation in public falsely representing:
 - the quality or standard of a good or service;
 - old goods as new;
 - sponsorship or approval of goods or services suppliers;
 - the need or utility of a good or service;
 - guarantee of goods without proper tests;
 - prices of goods or services; or
 - the facts of goods and services of other persons.

A statement, which is unlikely to mislead a common man, may not be considered an UTP. Some of the main types of UTPs are the following

- Bargain Sale, Bait and Switch Selling. It includes bargain sale without the real intention of offering the same. It could be offered for an unreasonably small time or for a small quantity or at the so-called bargain price without reference to the normal price. Similarly bargain price may be advertised as a bait to attract a customer so as to know his mind and preference for a product. Once attracted, the customer is offered other products, which is called 'switch selling'.
- Free Gifts and Promotional Contests. It covers 'free gifts or prizes which are actually not free
 and their price may be implicitly included in the price of the main product itself'. Similarly,

giving a discount after increasing the price is also a UTP. The MRTP Commission considerd promotional contests as per se bad and prejudicial to public interest as these tempt people to buy products on considerations different from cost, quality or need.

- Ignoring Product Safety Standards. The practice refers to selling goods not conforming to
 the product standards prescribed by a competent authority and is essential to prevent injury
 or risk to the prospective consumers. Such standards may be in respect of composition,
 design, performance, finishing or packaging of a product.
- Hoarding or Deliberate Destruction of Goods. Such an act could be with the intention of
 reducing the supply, creating scarcity and raising the price of the product. Essential
 Commodities Act also deals with such practices.

CONTROL OF UTPS

It must be clarified that the gateways, which were available under RTPs, were not available to UTPs. However, order on a UTP could be passed only if it was prejudicial to public interest. Similarly, a practice, which was specifically authorised by some existing law, was not actionable under the MRTP Act. The burden of proof that a practice is prejudicial to public interest lies on the complainant.

As a number of complaints about UTPs can be bogus, ingenuine or frivolous, the MRTP Commission required to order the DGIR to make a preliminary enquiry in this regard. The enquiry could be started on any of the bases as specified in case of RTPs and its order could fall in any one of the categories mentioned in case of RTPs. In addition, the Commission couldorder any information, statement or advertisement relating to a UTP to be published in public interest. The Commission could also order compensation for loss or damage to the affected person or party. The loss could be:

- Directly pecuniary, capable of being quantified;
- Indirectly pecuniary, like loss of profitable opportunity, reputation or credibility; or,
- Non-pecuniary loss like mental agony, physical illness etc.

DIVISION OF UNDERTAKINGS AND SERVERENCE OF INTER-CONNECTION

The Act empowerded the central government to order, on the recommendation of the MRTP Commission, division of any undertaking or to severe inter-connection between related undertakings to reduce concentration of economic power, which might be detrimental to the public interest. Such organisations having large market share might show monopolistic behaviour leading to restrictive trade practices. If the commission, after enquiry, recommends to the central government that an undertaking be split into more than one undertaking, it then also had to specify the manner of division and compensation payable, if any. The overall splitting scheme might specify the following:

- Transfer of the shares of the principal undertaking to other (created) undertakings;
- Transfer of liabilities and obligations;
- Adjustment of contracts already made;

- Payment of compensation involved; and
- Consequential and supplementary matters.

Similarly, the central government might direct severance of interconnection between a principal and other related undertakings, which could be prejudicial to the public interest or detrimental to the growth of the industry. In both the cases, the government could order disinvestments of shares in a manner and within the time limit recommended by the Commission. Disinvestment could be through public auction of a part of the assets, public offer of shares or fresh issue of shares. Thus, in such cases, the power of final decision lay with the central government and the Commission had only an advisory role. The major sections and provisions of the MRTP Act are given in Box 19.1.

GRADUAL DILUTION LEADING TO THE REPEAL OF THE ACT

As a result of economic and political compulsions as well as the process of economic liberalisation and reforms, the Act underwent gradual dilution over the years. The dilution was most visible in the area of control of monopolies and concentration of economic power – the central objective with which the Act was created. The Act itself provided for a number of exemptions and gateways on various grounds. With regard to UTPs in particular, the Commission had been giving a variety of orders depending upon the individual merit of the cases concerned. The Commission itself had rarely invoked the provisions with regard to monopoly control and concentration of economic power and there had been hardly any action on division of undertakings and severance of interconnection between undertakings. The dilution process is summarised in **Table 19.2**.

Table 19.2: Chronological Sequence of Measures Diluting the MRTP Act

Year	Measures
1973	Under the new industrial policy statement, a large number of industries opened to large houses laying base for concentration of economic power.
1982	All the 100 per cent export-oriented units established under free trade zones exempted from Section 21 and 22 of the Act (under the newly introduced Section 22A which empowered the government to notify industries to which Section 21 and 22 will not apply).
1983	Companies registered under the Act allowed adding new production capacity in areas of national priority, import substitution and high technology (subject to certain conditions). Later, firms were also allowed to use existing capacities to manufacturer-allied items without obtaining MRTP approval.
1985	Large industrial houses (including those within the purview of the Act) allowed entry into additional 21 high-technology items increasing further concentration of economic power.
1985	Sick industrial companies taken out of the purview of the Act for the purpose of expansion, modernisation or merger. In the same year asset limit of the MRTP companies raised from Rs 20 crore to Rs 100 crore.
1986	Benefit of delicensing extended to MRTP (and FERA) companies for establishing units in industrially backward areas in a number of product areas.
1988	Automatic re-endorsement of capacity at peak level of production achieved during 1988-90 for MRTP Companies (as in case of other undertakings), announced in April. In June, 'dominant' undertakings were freed from additional restrictions relating to licensing (imposed under the Act) in respect of products in which such firms did not have 'dominant' position.
1991	Asset limit for MRTP companies scrapped, Chapter III on monopolies dropped (except a few provisions) and the corresponding Act amended in the wake of the new industrial policy.

In the typical Indian business environment, MRTP Act had been the active example of conflict between growth and equity. The liberalisation and dilution of the Act was considered necessary from time to time as it tended to scuttle industrial growth. As it placed limits, directly or indirectly, on the growth of the large firms, these could not attain competitiveness in the world markets. Paradoxically, the Act, during the larger part of its past tenure, sought to promote competitiveness in the economy by circumscribing the growth and competitiveness of the larger firms.

THE COMPETITION ACT, 2002

In the present phase of economic reforms based on the three pillars of liberalisation, privatisation and globalisation, the Act, as seen in its original spirit, appeared redundant. A number of its provisions in the present-day context lost relevance and required to be substituted with new provisions in tune with the contemporary trends in business environment. The Act did not address a number of present-day issues like the abuse of intellectual property rights. In many respects its provisions were draconian and the implementation and control structure was heavily bureaucratic in nature. The Act was often cited as one of the main hindrances to foreign direct investment in the country.

The MRTP Act has been replaced by the competition Act 2002 on the recommendations of the SVS Raghvan Committee. As already pointed out, all the cases pertaining to RTPs and MTPs under the MRTP Act have been transferred to the competition commission of India established under the new Act and will be decided according to the provisions of the repealed MRTP Act. The major provisions of the Competition Act 2002 are as follows:

Major Sections of the MRTP Act and their provisions		
Section	Provision	
2(0)	Defines an RTP.	
33(1)	Gives 'deemed' RTPs.	
33(1)(f)	Defines resale price maintenance.	
33(1)(j)	Defines price control arrangement.	
35(h)	Provides for registration requirement of RTPs.	
38	Provides 'gateways' to RTPs.	
36A	Defines UTPs	
2(i)	Defines MTPs	
31(2)	Specifies Powers of the Central Government in respect of MTPs.	
2(g)	Defines interconnected undertaking.	
27(2)	Powers of the Central Govt. for division of undertakings.	
5	Relates to formation of MRTPC by Central Government.	
10(a)	Relates to power of MRTP Commission to enquire RTP.	
1		Contd

10(b)	Relates to power of MRTP Commission to enquire into MTP.
36B	Relates to power of MRTP Commission to enquire into UTP.
12(2)	Confers powers of a Civil Court to MRTP Commission.
12(B)(1)	Relates to power of the Commission to award compensation.
37(1)	Power to the Commission to issue 'cease and desist' order.
37(2)	Power to the commission to issue order to the contending parties to make amends.
15(a) to 15(c)	Restrictions on the powers of the Commission regarding MTPs, RTPs and UTPs.
12(c)	Enforcement of Commission's orders through civil courts.
11	Relates to power of the DGIR regarding preliminary investigation.
3	Provides exemptions from MRTP provisions.
Chapter-wise Provi	isions
Chapter III	Control and regulation of the concentration of economic power to the common detriment (now repealed, except three sections).
Chapter IV	Control of monopolies and monopolistic trade practices.
Chapter V & VI	Prohibition of restrictive trade practices.
Chapter V (B)	Introduced by MRTP (Amendment) Act, 1984 regulating unfair trade practices.

COVERAGE AND APPLICABILITY

The Act like the earlier MRTP ACT applies to the whole of India except the state of Jammu and Kashmir. The Act however empowers it to exempt any class of enterprises from the Act in interest of public or national security. It can also exempt any practice or agreement arising out of and is accordance with any obligation assumed by the country under any treaty, agreement or convention with other countries. Under the Act, no civil court has jurisdiction to entertain any suit or proceeding which the competition commission established under the Act is empowered by the Act to determine. However, the provisions of the Act are in addition to and not in derogation of, the provisions of the any other law in force.

PROHIBITION OF ANTI-COMPETITIVE AGREEMENTS

The Act prohibits persons and enterprises from entering into any agreement which has adverse impact on competition in any area of production, supply, distribution, storage, acquisition or control of goods or provision of services in the country, the Act prohibits the following agreements as these have anti-competitive effects:

- Decisions taken by an association of persons or enterprises which:
 - a) Directly or indirectly determine purchase or sale price;
 - b) Limits or controls production, supply, markets; technical development, investment or provision of services
 - c) Shares the market or source of production or provision of services by way of allocation of geographical area of market;
 - d) Results in bid rigging or collusive rigging.

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- Tie-in arrangements
- Exclusive supply arrangements
- Refusal to deal
- Resale price maintenance.

As can be easily seen, most of these provisions were contained in the MRTP Act also.

PROHIBITION OF ABUSE OF DOMINANT POSITION

An enterprise under the Act is considered to abuse its dominant position in the market if it:

- imposes unfair or discriminatory condition or price purchase or sale of goods or service;
- restricts production of goods or services or market in respect of these;
- restricts technical or scientific development to the detriment of the consumer interests;
- indulges in practices which deny market access to others
- uses its dominant position in one relevant market to enter into or protect other relevant market.

The Act provides that no enterprise shall abuse its dominant position.

REGULATION OF COMBINATIONS

Under the Act, combinations have been defined is terms of assets and turnover limits of enterprises after acquisition, merger or amalgamation. The act prohibits persons or enterprises person entering inter a combination which is expected to have adverse effect or competition within the relevant market in India. In that case, the combination shall be void. Since provision however does not apply to share subscription or financing facility or any acquisition by a public financial institutions, foreign institutional investor, bank or Venture capital fund, pursuant to any covenant of a loan agreement or investment agreement.

ESTABLISHMENT OF THE COMPETITION COMMISSION

The Act provides for the establishment of Competition Commission of India Consisting of a Chairman and 2-10 members to be appointed by the central government, and having a term of five years. There is also the provision for the appointment of a Director-General to assist the Commission. The basic duties of the Commission as provided in the Act are:

- To eliminate practices having adverse impact on competition;
- to promote and sustain competition;
- to protect the interest of consumers; and
- to ensure freedom of trade carried out by other participants in markets I India.

The Commission can enquire into any violation of the provisions of the Act. In order to determine whether an agreement has an appreciable adverse impact on competition, it may apply any one or more of the following competition criteria:

- Creation barriers to new entrants in the market;
- foreclosure of competition by hindering entry; into the market;
- accrual of benefits to consumers;
- improvement in production or distribution of goods or services; and
- promotion of technical, scientific and economic development by means of production or distribution of goods or services.

CRITERIA OF DOMINANT POSITION

The Act provides for the following major criteria by which the competition commission of India may determine whether an enterprise commands a dominant position in the market.

- Market size, resources and economic power of the enterprise;
- size and importance of the competitors;
- vertical integration of the enterprise;
- monopoly position acquired through a statute and dependence of consumers on the enterprise;
- barriers to entry in the field of operation of the enterprise;
- countervailing buying power;
- structure and size of the market in which the enterprise operates;
- relative advantage gained by way of contribution of the enterprise to economic development;
- Social obligation and costs.

If an agreement of an enterprise in a dominant position is found to be in contravention to the Act, the commission can order the enterprise to discontinue and not to re-enter such agreement or discontinue such abuse of dominant position.

INVESTIGATION OF COMBINATIONS

The Act empowers the Competition Commission to conduct enquiry into any merger or amalgamation of enterprises if such business combination's are expected to have adverse impact on the existing state of competition. In order to determine whether a business combination has or expected to have adverse impact on competition, any of the following criteria may be applied:

- The extent of barriers in the market;
- actual and potential level of competition from imports;
- level of combination in the market;
- monopoly power of the combination that might result;
- extent of effective competition likely to sustain in the market; and
- extent of vertical integration in the market;

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- benefits of combination in reation to the loss of competition;
- impact on innovations.

The Act lays down detailed procedure for investigation. If a combination is likely to have significantly adverse impact on competition, the commission may even pass orders that the combination shall not be given effect.

No civil court has the jurisdiction to entertain any suit or proceeding in respect of any matters which the commission is empowered by the Act.

CONCLUSION

The competition Act 2002 is a more liberal and flexible version of the earlier MRTP Act which had gradually become irrelevant and anti-growth with the passage of time. The new Act recognises anti-competitive practices in a wider context and institutes a flexible but effective mechanism to product and promote competition. Much of course will depend upon the spirit with which the new Act is implemented. In particular, it must avoid the pit falls which characterized the implementation of its predecessor Act.

Key Terms

Acquisition
Bid (or collusive) rigging
Exclusive dealership agreement
Merger

Monopolistic trade practices Resale price maintenance Restrictive trade practices Tie-in sales Unfair trade practices Venture capital Vertical integration

Supplementary Readings

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Long Questions

 Discuss the control mechanism for MTPs, RTPs and UTP under the MRTP Act. What are the limitations of the mechanism.

- 2. Do you think that the MRTP Act had become irrelevant under the present economic policy based on liberalisation, privatisation and globalisation? Give reasons and examples in support of you answer.
- 3. Do you think that the new Competition Act 2002 will remove the limitations of the MRTP Act? Is the new Act old wine in new bottle?
- Account for the rapid growth of restrictive and unfair trade practices in the recent years. How can the
 existing legislative provisions be made more effective in dealing with such practices.

Short Questions

- 1. Why are monopolistic trade practices (MTPs) undesirable?
- 2. Define monopolistic, restrictive and unfair trade practices. Give three examples in each case.
- 3. What were the powers of the MRTP Commission?
- 4. What were the main functions of the Director-General of Investigation and Registration (DGIR)?
- 5. What was the basic purpose of the registration function of DGIR?
- 6. What are the 'Gateways of Public Interest? How were these applied to MRTPs?
- 7. How were 'goods' and 'services' defined under the MRTP Act?
- 8. Briefly describe the regulatory mechanism for restructive trade practices under the MRTP Act.
- 9. Define the following with one example each:
 - i. Exclusive dealership agreements
 - ii. Collective tendering
 - iii. Resale Price Maintenance
 - iv. Manufacturing Process Restrictions
- 10. What were the gateways and balancing provisions under the MRTP Act?
- 11. Briefly explain the following:
 - i. False or misleading representations;
 - ii. Switch-selling;
 - iii. Baits.
- 12. Describe the control mechanism for unfair trade practices under the MRTP Act.
- 13. What are the circumstances or conditions under which division of an undertaking becomes necessary?

Practical Assignments

- Do a survey of about 100 consumers belonging to different income and educational levels and find out 10 leading restrictive and unfair trade practices. Summarise the suggestions given by the sample respondents to control such practices and discuss the results in the class.
- 2. Survey the promotional schemes offered to customers at the national level and detect unfair practices involved. Interview a cross-section of about 50 customers of the promoted products in order to check their awareness level regarding the unfair practices and find out their response. Share the results in the class for subsequent discussion.

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TECHNOLOGICAL ENVIRONMENT

Chapter Outline:

- Introduction
- Technological Development and Technical Progress : Some Concepts
- Determinants of Technological Environment
- Indicators of Technological Development
- R&D Expenditure in India
- Hallmarks of India's Technological Environment
 - □ Technological Backwardness
 - ☐ Institutional Environment
 - ☐ Incentives for Technological Research and Development
 - Incentives for R & D Activities
 - Technology Promotion for Self-reliance
 - Consultancy Support
 - ☐ Information System for Technology Development
 - □ Arrangement for Technology Import
 - RBI's Automatic Route
 - SIA/FIPB Route
 - Technology Import Through Foreign Technicians
 - ☐ Technology Development and Mødernisation Schemes of Development Banking Institutions
- India's Science and Technology Policy: Objectives and Implementation Strategy
 - □ Science and Technology Policy; 2001
 - □ Science and Technology Policy; 2003
- Some Issue: racing India's Technology Policy and Environment
- Conclusio

INTRODUCTION

Broadly speaking, technology refers to the application of knowledge, skills, scientific principles or even ideas to the production or improvement of goods and services that have utility and value. Technology lies at the heart of economic development and human progress. Improvements in technology reflect in lower costs, better product quality, resource saving, faster production and ultimately improvement in competitiveness, productivity and growth. Constant and all round improvement in technology spurs product innovation, encourages competition and gives competitive edge to business firms. In short periods, new technologies provide monopolistic advantages to firms which are ahead of rivals in technology and may even maintain the lead through sustained technological development.

TECHNOLOGICAL DEVELOPMENT AND TECHNICAL PROGRESS: SOME CONCEPTS

Technological development in its elementary form is manifested in 'technical progress', which refers to increase over time in output resulting from a given combination of factors of production. It refers to the collective increase in the productivity of all the factors of production engaged in the production process. The rate of technical progress is, therefore, the proportionate (or per cent age) change in output resulting from given factor inputs. There are three major categories of technical progress:

- Induced and Autonomous Technical Progress. Induced technical progress is triggered by relative changes in the prices of factors of production. For example, a rise in wages relative to cost of capital may inspire technical progress that seeks to save upon labour costs. If technical progress is independent of relative factor price changes, it would be called autonomous.
- Embodied and Disembodied Technical Progress. Embodied technical progress is built or integrated into the capital equipment and is not available separately. In fact, the technical change and the capital equipment in which it is 'packaged' are inseparable. In this case technology transfer invariably involves movement of the embodying capital stock. Disembodied technical progress is free from any equipment and is available in the form of improved knowledge, procedures, methods, designs, etc.
- Neutral and Biased Technical Progress. A neutral technical progress saves different factors of production used in the production process in the same proportion so that the proportion in which the factors of production are combined in the process remains unchanged after the progress. In biased progress, this balance gets disturbed. For example, a technical progress biased against labour will save more labour than capital, lowering labour-capital ratio after the technical change. This will have the effect of displacing labour and creating unemployment. The labour will have to wait till more job opportunities are created in the process of industrial expansion following the technical progress. The bias of technical progress is generally related to relative factor prices. For example, in countries where wages tend to rise faster than the rate of interest (as cost of capital) technical progress tends to be of labour saving type.

DETERMINANTS OF TECHNOLOGICAL ENVIRONMENT

The growth and competitiveness of the business sector hinges critically on the technological development which itself requires a fostering environment. Human factor lies at the heart of all technological development and the spirit of experimentation, innovation, enterprise and failure tolerance play a key role in the development of new technologies. State always plays a critical role in providing research infrastructure and a technology policy, which aims at developing research talents and their application in practical areas of production. The following factors play an important role in determining the technological environment in a country:

- Infrastructure in technical education, training and research;
- Quality of human resources in terms of research aptitude, innovative spirit and enterprise;
- Incentives and facilities for research and development;
- Compensation systems and retention policies for people engaged in scientific and industrial research;
- Direct State participation in scientific and technological development;
- Monetary and fiscal concessions for in-house research and development in the corporate sector;
- Access to foreign technology;
- Effectiveness of patent, copyright and other laws for protection of intellectual property;
- Institutional arrangement for the promotion of technological environment.

Institutional arrangements, particularly financial support systems, play a great role in reducing institutional, technical and financial constraints to technological development. A competitive environment generally creates a good fostering environment from the growth of technologies as it spurs firms to go in for cost compression measures in which technology plays a major role. For all this to happen, firms have to be given adequate protection for their intellectual property in the form of new designs, production techniques and processes on the development of which they might have taken substantial risk and financial stakes. Most governments formulate technology policies to create an enabling environment for technology growth. Technology policy of the Government of India is discussed later in the Chapter.

INDICATORS OF TECHNOLOGICAL DEVELOPMENT

It is quite difficult to measure technological growth as it is evidenced in a wide variety of new technical processes – both embodied and disembodied – in a large range of industrial and service activities. However, to bypass the measurement problem, it is possible to visualise a few indicators, which provide a rough approximation of technological development. These can be used to obtain an idea of the technological development in a country. Some of these are:

Trends in the growth of science and technology (S&T) expenditure;

- Trends in the growth of research and development (R&D) expenditure;
- Total number of technical (including technical-cum-financial) foreign collaborations;
- Assistance sanctioned by various financial institutions for technological development and upgradation;
- Total value of foreign (outward) remittances on account of payments for foreign technology (like royalties, know-how and technical fees etc); and
- Investment in research and technology infrastructure (both in public and private sectors).

Data on many of these variables is generally available in various offices and non-official publications. Most of these factors are input variables and reflect more on potential rather than actual technological development. More particularly, actual technological development is reflected in introduction of new technologies, investment in new and technologically superior capital equipments and processes all reflecting in faster and better-quality output andlesser costs and prices. Development of quantitative indicators of actual technological growth is a complex task and has to be indicated largely in qualitative terms.

R & D EXPENDITURE IN INDIA

Though India has an elaborate science and technology policy (discussed in the subsequent sections) and encourages R&D activity through public institutional infrastructure and fiscal concessions, the expenditure on R&D is typically low. India currently spends about 0.8 per cent of GDP on R&D and the Science and Technology Policy (announced in January 2003) has the target to raise it to 2.0 per cent by the year 2007. It is interesting to note that about 80 per cent of India's total R&D expenditure (equivalent to \$3.2 billion) is made by the government itself. In sharp contract, in most of the developed countries private sector incurs 60-80 per cent of the total R&D expenditure. In order to raise the share of R&D in GDP from 0.8 per cent to 2.0 per cent, the country would require an investment of about \$8 billion in R&D and the private sector and the MNCs will have to play an important role in this regard. R&D will play an important role in enhancing the competitiveness of Indian industry in both domestic and foreign markets. This has been demonstrated by the experience of Finland which raised its R&D expenditure during 1985-2001 (Box 20.1).

BOX 20.1

Returns from R&D: The Finnish Experience

Global evidence suggests that there are great advantages from R&D activity in the long run. In Finland, total expenditure on R&D as proportion of GDP rose from 1.5 per cent in 1985 to 3.2 per cent in 2001. During this period, its export/GDP ratio doubled to 39 per cent, the share of high-tech exports in total exports rose from 6 per cent in 1990 to 24 per cent in 2001, and labour productivity in industry grew from 40 per cent in 1985 to 100 per cent in 2001. At present the country's GDP is growing at 3-4 per cent in spite of recession in Europe. Finland is now the world's second largest R&D spender after Sweden.

HALLMARKS OF INDIA'S TECHNOLOGICAL ENVIRONMENT

TECHNOLOGICAL BACKWARDNESS

For a number of decades, India has been regarded as a technologically backward economy. Lower state of technology has been the result of number of a factors and has been responsible for slow growth (particularly in agriculture), higher cots, low competitiveness, uneconomic or wasteful use of economic resources and greater external dependence. Some of the major impediments to technological development have been:

- Poor state of infrastructure for technological research;
- Low level of government expenditure on the development of science and technology;
- Inadequate monetary and fiscal incentives for technological research and development, particularly in the private sector;
- Demotivating work environment in the form of low remuneration, lack of research funds and facilities, lack of recognition for original work etc. for talented researchers leading to their outflow to advanced countries;
- Weak and inefficient regime for intellectual property protection; and
- Intense competition from MNCs.

The main components of the country's technological environment are as follows.

INSTITUTIONAL ENVIRONMENT

The country has an elaborate state-sponsored institutional arrangement for the development of science and technology in diverse areas of the economy. Detailed description of the same is provided in Chapter 13. Indian Council of Scientific Research (ICSR), Department of Science and Technology (DST) and Indian Council of Medical Research (ICMR) are among the premier institutions of the country engaged in the promotion of science and technology through a wide network of laboratories and technological research programmes. Some of the major technology development programmes are the following:

- Indian Solar Terrestrial Energy Programme
- All India Coordinated Programmes on Ionosphere Thermosphere Study (AICP/ITS)
- Intensification of Research in High Priority Areas
- Fund for the Improvement of S&T Infrastructure in Universities and other Higher Educational Institutions
- Technopreneur Promotion Programme (TePP)
- Scheme on Drugs and Pharmaceuticals Research
- Entrepreneurship Development Programmes
- Science and Technology Entrepreneurship Development Scheme

- Open Learning Programme in Entrepreneurship
- National Resources Data Management Programme
- Integrated Long-term Programme of Cooperation in S&T
- Sea Level Modeling and Monitoring Project
- Research and Development by Industry
- Programme Aimed at Technological Self Reliance
- Scheme to Enhance Efficacy of Transfer of Technology
- Promotion and Support to Consultancy Services
- Consultancy Promotion, Development and Assistance Scheme
- National Information System for Science and Technology Programme
- Nuclear Power Programme
- Indian Space Programme
- Ploy metallic Modules Programme (for prospecting marine non-living resources)
- National Data Buoy Programme (for Ocean observation and research)
- Satellite Coastal and Oceanographic Research Programme.

Most of these programmes are long-term in nature and have been sponsored by a number of premier government research organisations. In addition, there are a large number of short and medium-term programmes relating to various areas of technological research. These programmes have been immensely benefiting various segments of infrastructure and industry and making significant contribution to the advancement of scientific and technical knowledge.

There are a number of individual research centers in both the private and public sectors of the country which command prestigious positions in the various areas of R&D and new technology generation. (Box 20.2) The centers are capable of acting as nodal or nuclear centers generating research and technology in different areas of industrial application.

BOX 20.2 India's Premier Research Centres which can Act as Nuclei for the Future Growth of R&D Institutions Institutions Key Areas of Research Research Key Areas of Research Research Laboratory Laboratory Material sciences, blotech, IT, IISc. Inorganic, organic & physical BITS. Pllani chemistry, biochemistry, molecular robotics & intelligent systems. Bangalore blophysics embedded systems sem l-conductors. CAD/CAM. CDRI, Lucknow New drug discovery IIT, Kanpur synthesis of compounds, catalyst tropical diseases. cardiovascular. CNS. development contraceptives

Contd...

CFTRI, Mysore	Upgrade traditional food technology, reduce post-harvest losses of perishables	IIT, Mumbai	Microelectronics, inorganic chemistry, blomedical & genetic engineering, heat
Centre for Advanced Technology, Indore	Non-nuclear, high-tech areas of lasers and accelerators, plasmas and cryogenics	National Brain Research Centre, Delhi	Basic and clinical neuroscience, diseases and disorders of the nervous system
CCMB, Hyderabad	Molecular biology, cell biology, biophysics, genetics and biotechnology	National Chemical Laboratory, Pune	High performance materials, biotech organic chemical technology, polymers
IICT, Hyderabad	T, Hyderabad Pesticides, organic intermediates, fine chemicals, polymers, organic coatings		Neuroscience, yeast & plant biology protein folding, nuclear & atomic physics
Indian Institute of Chemical Biology, Kolkata	Natural medicinal, biological and industrial products, synthetic duplication, innovative immunossay techniques.	TIFR's National Centre for Biological Sciences, Bangalore	Biochemistry, biophysics and bioinformatics genetics, cellular organisation, neurobiology

Source: Business World, February 17, 2003

INCENTIVES FOR TECHNOLOGICAL RESEARCH AND DEVELOPMENT

Incentives for R&D Activities

The Department of Scientific and Industrial Research, as the nodal agency, operates a scheme for granting recognition to in-house R&D units in industry. The various incentives and support measures provided by the government to recognised R&D units in industry include:

- Income tax relief on R&D expenditure;
- Weighted tax deduction for sponsored research programmes;
- Exemption from the payment of custom duty on goods imported for use in government funded R&D projects;
- Excise duty waiver for 3 years on goods produced using indigenously developed technology duly patented in USA, Japan or in any country of European Union;
- Provision of accelerated depreciation allowance on plant and machinery developed on the basis of indigenous technology; and
- Direct financial support to R&D centers.

Technology Promotion for Self Reliance

The Department holds annual national conference on in-house R&D in industry and DSIR awards are given for the development of indigenous technology. DSIR also provides partial financial support to research, development, design and engineering projects for the development of new

processes and products for Indian and foreign markets. Assistance is also provided for developing system for absorption and upgradation of imported technology. Under its **Programme Aimed at Technological Self Reliance (PASER)**, the department provides partial financial assistance for development of technologies which promote self-reliance. The institutions provide assistance for effective transfer of technology. Under its scheme of **Transfer and Trading in Technologies** (**TATT**), it promotes and supports activities relating to export of technologies, projects and related services. The specific assistance measures include:

- Support to preparation of reports relating to technology export;
- Support for preparation of reports relating to technological experience in selected areas of industry;
- Publicity and dissemination of the country capability through workshops, trade fairs and exhibitions; and
- Support for the demonstration of technologies identified for exports.

Consultancy Support

A part of the technology development programme consist of measures for the promotion of consultancy capabilities of the country both for home market and exports. Such measures are undertaken through Consultancy Development Centre (CDC), which was promoted as a non-profit society under DSIR in January 1986. The scheme of Promotion and Support to Consultancy Scheme is aimed at strengthening consultancy services in domestic and foreign markets. Some of the measures to assist and promote consultancy include:

- Providing computerised database for consultants;
- Conducting human resource development and training programmes for consultancy; and
- Sponsoring consultancy development programmes for other organisations.
 For various activities of the Council, DSIR provides both direct and indirect support.

Information System for Technology Development

For the promotion of suitable technology, National Information System for Science and Technology (NISSAT) provides support to the interworking of information systems on science and technology. The system seeks to promote the services provided by the existing networks for technology development. It is also operative in the direction of improvement in existing information handling tools and techniques for the growth of indigenous technologies. The system supports 12 major information networks in the country and many of these have access to international databases.

ARRANGEMENT FOR TECHNOLOGY IMPORT

The main channels for technology import in the country are (a) purely technical collaborations (with no foreign equity investment) and (b) technical-cum-financial collaboration (involving

foreign equity). Foreign collaborations fall within the purview of the Ministry of Commerce and Industry (Department of Industrial Policy and Promotion). Foreign technology is inducted in the country through these forms of collaboration. The various state agencies involved in the collaboration agreements along with their basic functions are specified in **Table 20.1**.

Table 20.1: Various State Agencies Involved in Clearing Foreign Collaboration Agreements for Technology

Agency	Main functions	
Foreign Investment Promotion Board (FIPB)	To increase the inflow of foreign direct investment (FDI) through transparent and effective policies.	
2. Foreign Investment Promotion Council (FIPC).	To facilitate FDI and identify areas for FDI.	
3. Foreign Investment Implementation Agency (FIIA)	To deal with the problems faced by foreign investors in project implementation.	
4. Investment Promotion and Infrastructure Development Cell (IP&ID)	To disseminate information about foreign investment climate in the country, to coordinate and monitor projects for foreign investment and to facilitate solutions to the problems of foreign investors.	
5. Secretariat for Industrial Assistance (SIA)	To guide prospective entrepreneurs on foreign collaborations and capital goods imports.	
6. Reserve Bank of India (RBI)	To facilitate, promote and clear FDI proposals in selected areas of national importance.	
7. Business Ombudsman	To deal with complaints regarding delays in the clearance or approval of projects.	

Depending upon the nature and type of foreign collaboration, two routes viz. RBI's automatic route and FIPB route are available to prospective investors. The details of these routes are provided in Chapter 38. Another channel for acquisition of foreign technology is through foreign technicians. This can be achieved through:

- Hiring of foreign technicians, or
- Deputation of Indian technicians abroad for receiving training and learning technology.

In this respect no approval from the government or the RBI is required. RBI is authorised by the government to issue foreign exchange through authorised dealers. Exporters can draw foreign exchange from their foreign currency accounts (FCAs) or 'Export Earners' Foreign Currency Accounts' subject to limitations with regard to monthly payments and duration of training or apprenticeship. Funds in these accounts can also be utilised for foreign testing of domestic raw materials and indigenous technologies.

TECHNOLOGY DEVELOPMENT AND MODERNISATION SCHEMES OF DEVELOPMENT BANKING INSTITUTIONS

A number of development banks in the country are providing long-term assistance for technological development and upgradation through various schemes for different industrial segments. Such schemes and measures are summed up in **Table 20.2.**

Table 20.2: Technological Development and Modernisation Schemes of Various Development Banks

Institution		Technological assistance schemes and measures	
1. Industrial Development Bank		Soft loan assistance for modernisation.	
	India (IDBI)	 Financial assistance under Technical Development Fund assistance. 	
		• Financial assistance for import of capital equipment under Equipment Finance Scheme .	
		 Concessional assistance to textile sector under Textile Modernisation Scheme. 	
		 Financial assistance to projects for the development of indigenous technology and adaptation of imported technology. 	
		 Assistance for quality testing and establishment of training-cum- development centers. 	
2.	industrial Finance Corporation of India (IFCI)	 Assistance for modernisation of the jute industry under Jute Modernisation Fund. 	
		 Assistance for modernisation of sugar industry under Sugar Development Fund. 	
		 Assistance to small entrepreneurs for development of technology, R&D activities and for adopting quality control measures. 	
3.	Industrial Credit and Investment Corporation of India (ICICI).	 Foreign currency loans for import of capital equipment and technical services. 	
		 Consortium arrangements with other development banks for modernisation of various industries. 	
		 Priority in project finance for new production processes and products. 	
	•	 Leasing assistance for computerisation and modernisation of various industry segments. 	
		 Long-term assistance for commercialisation of new technologies under Venture Capital Scheme. 	
		 Liberal assistance for technology development projects founded on indigenous R&D activities. 	
3.	Industrial Reconstruction Bank of India (IRBI).	 Financial assistance for modernisation and renovation of technology of industrial units. 	
	•	Assistance for the technological up gradation of sick units.	
5.	Small Industries Development Bank of India (SIDBI)	Assistance for purchase of capital equipment, acquisition of technical know-how, drawings, design etc., up gradation of process technology and quality improvement under Technology Development and Modernisation Fund scheme.	
6. S	State Finance Corporations (SFCs)	Financial assistance for renovation of small and medium units. Foreign currency loans for import of capital equipment and technical know-how.	

INDIA'S SCIENCE AND TECHNOLOGY POLICY: OBJECTIVES AND IMPLEMENTATION STRATEGY

Technology policy is an important factor that provides an enabling environment for technological development. It enunciates the objectives and the principles on which future

technological development will be founded. The latest version of the country's Science and Technology Policy was brought out in the year 2003, the forerunner policies being the policy resolution of 1958 and Technology Policy Statements of 1983 and 2001.

THE SCIENCE AND TECHNOLOGY POLICY, 2001

The main objectives of the policy are the following:

- Promotion of self reliance;
- Sustainable and equitable development;
- Enlarged contribution to economic growth;
- Natural resource conservation and protection of physical environment;
- Maintenance of national security;
- Philip to innovation and wealth generation;
- Mitigation of natural hazards;
- International cooperation through sharing of material and intellectual resources; and
- To enhance international competitiveness of Indian industry.

It is recognised that fulfillment of these objectives requires a dynamic and flexible science and technology policy that is capable of adapting itself to rapidly changing circumstances. This of course requires a pragmatic implementation strategy. The broad contours of the implementation strategy are the following:

- Modernisation of the infrastructure for science and engineering in academic institutions to create a strong base for a steady flow of skilled manpower.
- Simplification of administrative and financial procedures to promote research projects in the area of technology.
- Creation of world-class research facilities in major science and technology institutions.
- Enhancement of the career prospects of scientists and technologists to reverse the outflow of talents and to attract new talents.
- Involvement of a wide spectrum of people in the scientific enterprise and utilise their skilled knowledge for prudent use of natural resources.
- High priority to the development of technologies that help in making domestic industry internationally competitive and which caters to the basic needs of the people.
- Promotion of close interaction between industry, academia and government institutions to promote fresh ideas and establishment of technology incubators close to academic institutions.
- Development of mechanisms for promoting, nurturing and rewarding innovation.
- Establishment of rigid quality standards and accreditation of testing and calibration laboratories.

- High reward for successful inventions.
- Fiscal measures for enhancement of contribution of private industry to R&D.
- Development of the areas of indigenous knowledge based on long and rich tradition particularly in the areas of natural resources of land, water and bio-diversity.
- Promotion of research on natural phenomena and technological solutions for pre-and postdisaster situations.
- Encouragement and promotion of R&D projects for generation and protection of intellectual property.
- Wider involvement of bodies of scientists and engineers in the formulation and implementation of government policies on technology.
- Enhancement of public awareness of science and technology for wider acceptance of technology policies and their positive participation in such programmes.

Though science and technology policy of the government has lofty objectives and comprehensive implementation strategy, total expenditure on R&D in the country is less than 2 per cent of GDP.

SCIENCE AND TECHNOLOGY POLICY, 2003

The latest science and technology policy is a landmark step aimed at ensuring fullest use of scientific development for the wellbeing of the society as a whole. It follows the broad objectives and strategy of the 2001 policy, but is more flexible and people-oriented. The major objectives of the policy are the following:

- Advancing scientific temper for a progressive and enlightened society ensuring its full integration with all spheres of national activity.
- Strengthening enabling mechanisms that relate to technology development, evaluation, absorption, and upgradation from concept to utilisation.
- Ensuring food, agricultural, nutritional, environmental, water and energy security of our people on sustainable basis.
- Providing functional autonomy and freedom to all academic and R&D institutions to encourage ambience for creative work.
- Promoting empowerment of women to all science and technology activities, ensuring their full and equal participation.
- Accomplishing national strategy and security-related objectives by using the latest science and technology advances.

The policy has been designed to be implemented in a time-bound manner. The broad strategy focusses on efficiency, and productivity by identifying specific plans, programmes and projects which have clearly defined tasks and are based on clear assessment of resources required. The key strategic points of the policy are the following:

- Strengthening measures to increase the rate of generation of high quality skilled technical manpower at various levels;
- Ensuring synergy between scientific and industrial research, facilitating transfer of technology and encouraging indigenous R&D in industry;
- Establishing new funding mechanisms for promoting basic science research;
- Evolving mechanism for making S&T personnel an integral part of planning and implementation of S&T programmes;
- Making arrangements and creating facilities for harnessing indigenous knowledge for wealth and employment generation; and
- Strengthening S&T infrastructure in academic institutions.

SOME ISSUES RELATING TO INDIA'S TECHNOLOGY POLICY AND ENVIRONMENT

In spite of the government's awareness of building a strong technological base, the fact remains that the level of indigenous technology in most of the industry and service segments is low and the technological gap between Indian and foreign technology is widening. As a result, the level of competitiveness of firms based on indigenous technology is low vis-à-vis MNCs in both home and foreign markets. Though successive technology policies of the government have emphasised self-reliance as one of their major objectives, the poor state of domestic technology in conjunction with increased challenges of competition has led to sharp rise in the demand for foreign technology and the need for foreign direct investment. Under economic liberalisation, particularly since 1991, the government has practically adopted an open-door policy for FDI though its actual inflow is much less than expected due to various administrations, economic and administrative problems. (See Chapter 35). During 1995-2001, FDI inflow in the country had an annual value ranging between \$2-3 billion except the year 1997-98 when it was \$3.6 billion. During the decade 1991-2001, a total number of 7,116 foreign technology agreements and 13,640 FDI agreements involving about Rs. 2,70,000 crore were approved. The actual FDI approved during the decade was hardly 20 per cent of the total approvals.

Some of the major issues and problems facing India's technological environment and policy are the following:

- The government heavily dominates research in science and technology and the participants of private enterprise, in spite of various incentives and concessions, are very low in the field of R&D.
- At the level of advanced research, there are conditions of stagnation characterised by lack
 of research infrastructure, poor incentives, lack of recognition, bureaucratic styles and
 outflow of talents to other countries.
- The output of technologies that are capable of commercialisation is very low. The transfer and diffusion of technology from academic institutions to industry is very limited in spite of a number of initiatives taken by the government in this direction.

- The regime for intellectual property protection is quite weak which discourages the
 development of indigenous technology as well as the inflow of foreign technology (both
 embodies and disembodied).
- Going by the number of collaborations, the level of depth of technology transferred or
 payments made for foreign technical know-how, technology import into the country is
 relatively limited in relation to other emerging market economies. This has been in spite of
 liberal policy towards foreign investment and technology.
- Restrictions on duration and rates of royalty, foreign equity participation, discouragement
 to large, one-time front-end payments still act as impediments to technology transfer from
 abroad. Such restrictions are imposed mainly from the point of view of foreign exchange
 and balance of payments but prevent the flow of sophisticated technology to domestic
 industry.
- Liberalisation of policy for technology import tends to stifle the growth of indigenous technology. In the fiercely competitive technology market abroad, the rate of growth of marketable technology is very fast and can be easily accessed. By contrast, indigenous technology development is costly, slow and uncertain. Domestic technology market of India is quite backward and imperfect.
- Poor knowledge about technologies and technology markets abroad has often resulted in Indian collaborators settling for outdated foreign technologies. In a number of cases, outdated, inappropriate or unsuccessful technologies have been dumped on Indian industry.
- In the technology policy statements made from time to time, there has been a little emphasis
 on the capacity of the domestic firms to assimilate and absorb foreign technology. This has
 often resulted in repetitive imports of same or similar technologies causing avoidable foreign
 exchange outflow.

BOX 20.3

Main problems and Issues Facing Technology Environment and Policy in India

- Heavy dominance of government in technology development
- Conditions of stagnation in technology research
- Low rate of technology commercialisation
- Slow rate of technology transfer and diffusion
- Weak intellectual property regime
- Limited import of technology due to restrictions
- Stifling impact of technology import on domestic R&D
- Inferior position of Indian partners
- Import of outdated and inappropriate technology
- Little emphasis on technology assimilation and absorption

CONCLUSION

Government lays sufficient stress on the development of science and technology but it level of expenditure on research and development is low. The country lacks high-end technical and scientific manpower and the problem is aggravated by the emigration of highly skilled people to developed countries where remuneration conditions and career opportunities are much higher. The result is that the country depends to a good extent on foreign capital and know-how at substantial cost to the domestic economy. Corporate organisations must inculcate a research culture to develop new technologies and products that are typical suited to the local conditions and applications. Continuous technological upgradation is among the core conditions for maintaining competitiveness.

Key Terms

Balance of payments
Biased technical progress
Disembodied technical progress
Embodied technical progress

Foreign direct investment (FDI) Intellectual property protection Neutral technical progress Royalty Technical collaboration Technology transfer Venture capital Technical Progress

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Long Questions

- 1. What is the relation between technological advancement and economic development? Why is India lagging behind the developed countries of the world in different areas of industrial production?
- 2. What are the determinants of technological environment? Discuss the technological environment of India. Is it conducive to the growth of industrial R&D in the country?
- 3. Discuss the nature and adequacy of various incentives for the promotion of technological R&D in the country. What are the returns on R&D in industry?
- 4. How do technology imports impact domestic R&D? Suggest a suitable policy for technological self-reliance in India.
- 5. Critically discuss the Science and Technology Policy (2003) of India. To what extent is it likely to spur private investment in R&D?

Short Questions

- 1. Distinguish between the following giving an example in each case:
 - a) Induced and autonomous technical progress;
 - b) Embodies and disembodied technical progress;
 - c) Neutral and biased technical progress.
- 2. How do the following affect technological environment?
 - a) Quality of human resources
 - b) Intellectual property protection
 - c) Access to foreign technology
- 3. How do technological imports affect domestic R&D in industry?
- 4. Give five leading indicators of technological development in India.
- 5. Give three major reasons as to which R&D in the private industrial sector is weak.
- 6. Account for the prevalence of obsolete or outdated technology in large segments of small and medium scale enterprises.
- 7. Why is the level of R&D expenditure low in India?
- 8. Give five major concerns relating to technological environment in India.

Practical Assignments

- 1. Hold a group discussion 'On the technology front, India is a sleeping giant'.
- 2. Organise a brainstorming session on the 'methods of encourage the inflow of foreign investment in industrial R&D sector in India' and prepare a report.
- 3. Prepare a status report of the current technological environment of India.