CHAPTER-V

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PROPOSAL FOR A BRAIN-DRAIN TAX

5.1 INTRODUCTION :-

In the earlier chapter, the feasibility or ground for having a Brain-Drain tax has been examined and it has been concluded that a developing country like India that experiences the Brain-Drain suffers from a net loss of Rs. 5,07,540.8 per emigrant. It has also been mentioned that this estimate of the net loss per emigrant to the United States is based on several assumptions and as such it is certainly under estimation of the actual amount of loss per emigrant. However, this definitely provides us the ground for suggesting a Brain-Drain Tax.

In this chapter we discuss the operational framework of such a Tax. The concept of Brain-Drain Tax is however, not an innovation. It was first suggested by Bhagawati and has since been discussed in various conferences relating to it. Phillipines is the first nation to go in for such a tax and the Phillippines experience with its limited coverage, exteremely low tax rate and total revenue collection of roughly 23 million pesos during the four year period 1973-1976 suggests that this is an important revenue base that can be employed by other developing countries.

The collection of such a tax, however, takes for granted the 'global tax' system under which the nationals abroad are taxed on the basis of equity. The schedular tax system which is in vogue in most of the developing countries today implies taxing of the citizens of any country on the basis of their residence rather than nationality.

The first section discusses the theoretical framework of the Brain-Drain Tax, while the next section provides the estimates of the proceeds of such a tax and the amount of revenue that can be earned from the tax.

: SECTION I :

5.2 MODEL FOR THE BRAIN_DRAIN TAX :-

The model for the Brain-Drain Tax, can be developed in the following manner.

5.2.1 DEFINITION OF A BRAIN_DRAIN TAX :-

The Brain-Drain tax is to be defined as the tax levied by the country of emigration, on the incomes of those skilled emigrants who go abroad and get a gainful employment. It thus would exclude the emigrants in the form of students, completing their higher education in the other country and returning to the home country after completing the education.

5.2.2 TAX COVERAGE : AND EXEMPTIONS :-

The Tax would be levied on all such emigrants who go abroad and get employment there. However, it would not cover those emigrants who return to their home country within five years of their emigration. The main purpose of having such a coverage is that the tax should be imposed on only those who cause a substantial loss to their home country by staying abroad for a substantial period of time. As is already mentioned, the tax would not cover the student emigrants going to the other countries for getting higher or specilised education.

The ememption from such a tax will have to be given in the following situations :-

1) The emigrants going abroad only for a tamporary period and then returning back to the home country.

2) The emigrant making a direct capital investment of a significant volume in the economic activities in the home country.

3) The emigrant who fails to secure a job in the country of his immigration.

4) The emigrant making substantial inward remittances to his home country, in the sense if the amount of remittances throughout his stay abroad happens to be higher than the computed cost of his education.

5.2.3 TAX BASE AND TAX CREDIT :-

Generally, the tax base for any kind of direct taxation is given by the income earned by the tax-payer in a given period of time. In case of the Brain-Drain Tax, however, the concept of transfer earnings has to be applied. The emigrant, in the absence of his migration would have earned some income in his home country. After migrating to the other country he earns a substantially higher income, obviously because of the difference in the earnings of the individuals in the two countries. The additional income that the emigrant would be able to get because of his migration should be taken as base for the Brain-Drain Tax. In this case there is a possibility of double taxing of the immigrant. In order to avoid double taxation the concept of credit can be actually applied.

Tax credit would mean the amout of tax that the immigrant pays from his income to the home country's Government should be reduced from his taxable income in the country of his immigration.

In additinn to such a tax credit, it is also essential to deduct the amount of his remittances from the tax base thus calculated in the above manner.

If we assign XA to the total amount of income earned by 'A' during his stay in the country of immigration, YA to the total amount of potential income that he would have earned in the absence of his migration in his home country and RA the total am unt of remittance sent by 'A' during his stay abroad, the formula for calculating the tax base can be written as :-

$$XA - (YA + RA) = \text{Tax base.}$$

Thus, while determining the tax-base the net additional income earned by the emigrant by migrating to the developed country has to be taken into account.

5.2.4 TAX RATE :-

The Phillipines Government has already started with the levy of a migration tax but the tax rate imposed by it is certainly very small. It is just 1.3% of the disposable income left with the immigrant. We feel that the tax rate in case of emigrants from India should be such as would serve two purpose.

1) It should discourage the migration only in the long run. In other words, the immigrant should not be encouraged to go back to his home country immediately, so that the benefits economic and other, from his migration are actually enjoyed by the country of his origin.
2) It should, in the whole span of his stay outside, recover the amount of net loss from his migration caused by him to his home country.

Thus the tax rate should not be too low to be insignificant but at the same time it should not be so high as would discourage the Brain-Drain totally.

5.2.5 SHIFTING AND INCIDENCE OF THE BRAIN-DRAIN TAX :

Shifting of the direct tax has always to be considered on the basis of two underlying principles :-

1) The shifting of the tax should not harm the community at large.

2) The shifting of the tax should be minimised to the extent possible.

The shifting of the Brain-Drain tax is possible in the following situations .

a) When the immigrant is directly selling his services/skills to the consumers, and when,

b) The immigrant reduces the amount of his remittances to his home country by the amount of his tax payment.

As suggested earlier, the first of the possible situations is ruled out when the tax rate, is properly fixed, and when the immigrant cannot sell his services at a exorbitantly high price in the competitive market (which has to be assumed as a real possibility.) while the second situation is automatically ruled out when the amount of his remittances is totally deducted from his disposable income while calculating the tax base.

It is obvious from the above discussion that, in case of Brain-Drain tax, which is properly levied and collected, the shifting of it can be minimised though it cannot be totally eliminated.

In case when the shifting of such a tax is minimised, the incidence of it and impact of it would totally fall upon the tax payer.

Thus the shifting of the Brain-Drain Tax is rather difficult to be exercised by the immigrant and it can well be minimised by a proper design of the tax system.

5.2.6 SYSTEM OF COLLECTION OF THE TAX :-

The collection of the Brain-Drain Tax requires the inter-governmental co-operation. The government imposing the tax should establish proper relations with the tax-collecting government. The figures relating to the income of the immigrants must be properly and promptly supplied to the Government of the country of emigration. The income-Tax authorities in the country of immigration shall actually collect the tax on behalf of the country of emigration for which a definite amount may be given to the collecting authorities to cover the administrative expenses involved in it. There should be proper vigilence on the entire machinery of tax collection and in fact the emigrants home government may even think of having it's own departmental office at the capital of the country.

This system of tax collection however, has to be given some more thought but since it would be out of the scope of the present study we have just mentioned here, what kind of a system can be evolved for the purpose.

CONCLUSION :-

It can be provisionally concluded from the above discussion that introducing the Brain-Drain tax under the global tax system is certainly feasible, but it involves certain difficulties emanating from the need for inter-governmental co-operation.

:: SECTION II ::

5.3 CALCULATIONS OF THE YIELD OF TAX :-

5.3.1 ESTIMATION OF THE TAX TEVENUE :-

In the earlier section we have already suggested the basic framework for having a brain-drain tax. Now we turn to the final aspect of it, that of estimating the approximate amount of revenue from such a tax for India on the basis of the estimated extent of Brain-Drain from India- to the United States, estimated potential income of those emigrants from India, estimated income earned by those emigrants in the United States and the estimated amount of income differential etc.

5.3.2 ESTIMATED INCOME OF THE EMIGRANT FROM INDIA INTO THE U.S.:-

The total income to be earned by the immigrant of the United States from India, can be calculated by taking into account the time series data relating to the per capita income for the past few years before the migration. We have already assumed in the earlier chaper that the emigrant migrates in 1981 and would stay in the United States for the next twenty five years. The per capita income figures for the United States are first taken into account for the years 1971 to 1981. On the basis of these data the figures for the next twenty five years have been projected by applying the least squares method. The statistical exericise is summarised below :

EQUATION :

$$Yc = a + b\ (X)$$

when,

$$a = \Sigma y / n$$

$$b = \Sigma xy / \Sigma x^2$$

Table No. 5.1

Per capita Income of United States.

Year (N)	Y (Dollars)	X	XY	x^2	YC
1971	472	- 5	- 2360	25	425.5
1972	514	- 4	- 2056	16	419.2
1973	571	- 3	- 1713	9	556.9
1974	607	- 2	- 1214	4	622.6
1975	644	- 1	- 644	1	688.3
1976	708	0	0	0	754.2
1977	783	1	783	1	819.7
1978	870	2	1740	4	885.4
1979	961	3	2883	9	951.1
1980	1025	4	4100	16	1016.8
1981	1142	5	5710	25	1082.5
N	ΣY		ΣXY	Σx^2	
11	8297		7229	110	

Note : The base figures of per capita income is U.S. Dollars are taken from work Development Report 1983 (world Bank publication).

On the basis of the above data, the projected trend values for the the next twenty five years are presented in the following table.

Table No. 5.2

Projected per capita Income in United States.

Year	Trend values of projected per capita Income (U.S.Dollars)
1982	1148.2
1983	1213.9
1984	1279.6
1985	1345.3
1986	8614
1987	1476.7
1988	1542.4
1989	1608.1
1990	1673.8
1991	1739.5
1992	1805.2
1993	1870.9
1994	1936.6
1995	2002.3
1996	2068.0
1997	2133.7
1998	2199.4
1999	2265.1
2000	2330.8
2001	2396.8
2002	2462.2
2003	2527.9
2004	2593.6
2005	2659.3

1 SDR = 11.5Rs.
1 Doller = 1.16 SDR.

Total Income in twenty five years = 45690.

In is evident from the above table that the amount of total income earned by the emmigrant of the United States, in a span of twenty five years would be Rs. 6,09,504.6. However, this is on the basis of national avarge of the United States. The skilled migrant is very much sure to earn more than this. We feel that the immigrant may earn at least ten times higher income than the national average and hence, we assign multiplier 20 to this amount.

The final figure of the income of the immigrant of the United States would be Rs. 60,95046. Let us call it XA, so,

$$XA = 60,95046 \text{ Rs.} \qquad \ldots . (1).$$

5.3.3 POTENTIAL INCOME IN THE HOME COUNTRY :

The total amount of potential income of the emigrant, in the absence of his migration has already been calculated in chapter IV, where it is estimated to be Rs. 13,20,730. We call it YA ; hence,

$$YA = 13,20,730 \text{ Rs.} \qquad \ldots . (2).$$

5.3.4 AMOUNT OF REMITTANCES :

The final figure of total inward remittances of 'A' in a given period of twenty five years has also been calculated in

Chapter IV- and it is Rs. 9,20,000. We call it RA; and hence,

RA = 9,20,000 Rs.

5.3.5 FINAL EQUATION :-

The final equation for calculating the tax base has also been discussed in this chapter in the earlier section. It can be written as ,

Tax base = XA-(YA + RA),

hence,

= 60955046 - (1320730 + 920000)

= 6095046 - 2240730

= 38,54,316 Rs.

Thus the tax base can be estimated to be Rs. 38,54,316. In the earlier chapter IV, the net loss that we have estimated per emigrant is Rs. 5,07,540.8, which is 13.17% of this amount of tax base. Thus if a flat rate of 15% is fixed as a rate of Brain-Drain tax the revenue per emigrant will be Rs. 5,78,177.4. It does not mean, however, that the tax should be levied by this flat rate only. It is just an attempt to estimate the possible amount of revenue from such a tax.

5.4 CONCLUSION :-

By applying a 15% flat rate on the total tax-base, the tax revenue per emigrant would be Rs. 5,78,177.4 which would be more than the net loss per emigrant.

We have estimated the total emigrants from India to the United States upto 1981 to be 73989 and hence the total revenue from bra n drain tax would amount to Rs. 4276.56 crores, for a given period of 25 years of their stay abroad.

Thus there is a strong case to be made for imposing such a Brain-Drain Tax on the Brain-Drain from developing countries like India. On the avarage, the Government may earn Rs. 176.06Cr. per annuam by way of Brain-Drain Tax.