CHAPTER IV
THEORIES OF RELATIONSHIP BETWEEN
PUBLIC DEBT AND DEVELOPMENT

Let us take into account the views of classical and neo-classical economists and Keynesians and post-Keynesians regarding the role and necessity of public debt as regards development and stability. Government expenditure in excess of Government tax revenue was deemed as budget deficit though the deficit may be financed through borrowing by the government from the public.

When Adam Smith wrote, at that time, Government expenditure was mostly unproductive and so the borrowing by the Government from the people to finance Government expenditure was deemed by Adam Smith as diverting resources from the private productive sector to the unproductive Government sector. So he opposed proliferation of public debt, as it would jeopardise development. Ricardo also opposed it in strong words and the efforts to give it a permanent character by providing the funding system in the form of sinking fund or otherwise, was declared by Ricardo as the most terrible scourge which was ever invented to afflict a nation.

Mr. J.B. Say who is wellknown for his say's Law held the same views as Adam Smith and believed that public debt is depriving the productive private sector of resources and to waste them in the unproductive government sector.

He Commented "There is this grand distinction between individual
borrower and a borrowing Government that, in general, the former
borrows capital for the purpose of beneficial employment, the
latter for the purpose of barren consumption and expenditure".
John Stuart Mill also opposed public debt, but he did it from the
point of view of his Wage-Fund theory and also showed exceptions
where public debt would not have harmful effects. He wrote "We
remarked that if the capital taken in loans is abstracted from
funds either engaged in production or destined to be employed in
it, their diversion from that purpose is equivalent to taking the
amount from the wages of the labouring classes."

He thought that the burden on the labouring classes was the same
whether the government collected revenue through taxes or through
borrowing from the public, but in borrowing, there was an
additional burden of interest payment, which in future,
would necessitate additional tax burden on the people. Thus he
opposed the theory of public debt and supported the theory of
gathering resources through taxes. He wrote: "If the Government
had abstained from taking this capital by loan, and had allowed
it, to reach the labourers, but had raised the supplies which it
required by a direct tax on the labouring classes, it would have
produced (in every respect but the expense and inconvenience of
collecting the tax) the very same economical effects which it did
produce, except that we should not now have had the debt".

At the same time, he enumerated exceptions wherein public debt
will not have the burdensome effects on the labouring classes and
public debt, in those circumstances, may be helpful. As for
example, when borrowing by the Government is from abroad, there
is no burden on the labourers and capital of the respective
country that incurs debt. Also if the excess capital in the
private sector which would have been invested abroad is instead
invested in public debt within the country, it will be
beneficial. Also the funds that the private sector would have
used unproductively are invested in public debt, the adverse
effect on labourers and native capital will not be there. He
also urged that when Government bonds are offered to the public
for investment, this may encourage saving on the part of the
people and thus total saving in the economy may increase due to
the provision of this additional opportunity to invest which may
provide interest income.

But J.B. Say while criticizing the role of public debt, had
already shown some useful ways of using public debt for social
utility projects which may be helpful to even the private sector.
He had shown the direction but he was sceptical about such
productive use of public debt and so he had written; "unless the
principal (amount) be spent upon objects of permanent public
benefit, as one roads, canals or the like, it were better for the
public, that the capital should remain inactive, or concealed;
since if the public lost the use of it, at least it would not
have to pay the interest." We may add communication system, health
measures and educational system as projects which may be
undertaken by the Government with the help of public debt on
which rates of interest may be low.

But Mr. G.F. Bastable was more forthright in this respect and
did not mince words and made a useful distinction between economic outlays and non-economic outlays. Economic outlays are productive outlays which can create revenue for the Government and thereby they prove to be self-sustaining. He wrote:—

"Actual purchase of productive property or creation of revenue-yielding works may fairly be defrayed by loans. The property or particular work may be regarded the primary object of the debt, and is at hand to pay the interest on it. What we have called 'Economic' outlay has a claim to be met by borrowing that does not hold in respect of other forms has the disadvantage of taking the citizens wealth for the purpose of accumulation, and should be employed springly, if at all. To meet the cost of the purchase of the Russian railways, or even of the English telegraph, by immediate taxation even were it practicable, would not be correct".

Here the more important point that becomes clear is that certain public utility projects are very expensive and require huge expenditures due to their indivisibility and their effects are all pervading and so revenue required to construct them through taxes also may prove to be very burdensome for on the people. The amounts required being very big and hence borrowing is found to be a better alternative as it can be repaid in future in smaller installments either through revenue collected through taxes or by charging prices for the services generated. Thus Bastable had broken a new ground.
Keynesian theory of public debt is based on macroeconomic theory without caring for its macrofoundations and was developed during the Second World War time when there was the problem of controlling inflation. During war times, many Governments were tempted to resort to massive deficit financing which led to inflation. But it was suggested by Keynes that the amount of money measuring the existing inflationary gap could be tapped by the Government by borrowing from the public and either not spending it or spending it, but thereby lessening the necessity of borrowing from the public and either not spending it or spending it, but thereby lessening the necessity of borrowing from the Central Bank and other banks. Thus during war time, public borrowing could be used to control inflation and after the termination of the war, repayment of borrowed money could be undertaken so that prices might not fall due to stoppage of war expenditures. Here, the Keynesian theory tended towards belief that public debt was to be resorted to for maintaining price stability against the forces of inflation or deflation rather than for gathering revenue for the Government. So the followers of Keynes like Mr. A.P. Lerner developed the theory of Functional Finance based on this logic. Here we observe that no pains were taken to link or base this macro-theory with its necessary microfoundations.
BARRO-MODEL OF PUBLIC DEBT

Even Keynes and his followers could not develop the theory of public debt determination. It came to the lot of Mr. Robert J. Barro to develop it. He pointed out that when the optimum level of tax rate or tax revenue as the proportion of national income is reached, public borrowing is resorted to by the Government. We know that the collection of tax revenue involves collection cost for it. If the collection of tax revenue is to be increased, the proportion of collection cost to national income will increase proportionality if national income is kept constant. In the same way, if the collection of tax revenue is kept constant, increase in national income will reduce the ratio of collection cost to national income. The objective of the Government in Barro's Model, is to keep the ratio of collection cost to national income constant. This leads to the conclusion that the proportion of public borrowing to national income should be kept constant. So the Government expenditure in excess of this optimum tax revenue should be financed through Government borrowing from the public. In order to keep the proportion of tax revenue to national income constant, the tax rates are to be kept at their optimum levels so deficits have to be changed in accordance with constant tax rates. So he clearly wrote: "Central position is that deficits are varied in order to maintain expected constancy in tax rates."

Barros model looks to be more relevant (though not sufficient), because the Keynesian model of Functional Finance takes into account only the goal of price-stability while Barro's model which
desires to keep a certain optimum ratio of tax revenue to national income constant assuming expenditure as given, purports to maintain stability in national output also along with stability in prices. But in underdeveloped countries, where search is on to find alternative sources of revenue for the Government to meet soaring public expenditures, public debt is mainly meant as a resource gathering device to pursue development efforts and hence Barro's model is relevant but is not sufficient to throw full light on the determinations of public debt and hence it is not much helpful in policy making regarding public debt, tax revenue and Government expenditures.

VICKREY'S THEORY OF PUBLIC DEBT ILLUSION

It was argued by Mr. William Vickrey that person who purchase Government bonds and thereby lend money to the Government, are not perfectly aware of the tax burden that will be imposed on people including themselves in future for repayment of these loans with their interest payments and thus they suffer from a sort of public debt illusion. If the lenders are fully conscious of the future burden of the public debt incurred by the Government in the present, they would not be ready to subscribe to the Government bonds and thereby lend to the Government. But actually, it is the illusion on their part that what is distant in time and appear in future, is not taken seriously by them and thus they suffer from this time illusion which makes subscription by them to public debt possible.
CAVASCOSILVA ANIBAL A's VIEWS :-

But it was thought that the work "illusion" is too harsh and is likely to cast a view that people are irrational while rationality is the first assumption of the science of Economics. So this phenomenon was termed as an imperfect perception by some economists. Cavascosilva and Anibal A correctly wrote that "(It is) an incorrect or imperfect anticipation (i.e. underestimation) by individuals of their own shares in future taxes that an issue of public debt involves".

This argument was further modified by Ferguson by locating future uncertainty in the method and structure of tax collection as the basis for this underestimation of their future tax liabilities by the bond holders. So according to him, this phenomenon of underestimation of future tax liabilities against bonds being considered as assets grew from the above mentioned type of uncertainty. He pointed out; (Public debt underestimation or illusion represent a collective term which includes all factors that) cause people to treat Government bonds as assets but to underestimate in future periods to service and retire the debt.

Whatever it may be, but in the present, public debt has become a very important source of gathering resources for the Governments of the under developed countries to finance their soaring expenditures for their planned economic development.

As the public sector outlays increase, necessity of gathering revenue through public borrowing increases. At the same time, we
should note that increasing public debt and the burden of repayment of debt and payment of interest becomes a constraint on the incurring of further public debt. So this may prove to be a negative factor. But it has also been observed that as the burden of public debt increases, governments are tempted to incur more public debt so as to obviate the present difficulties as regards gathering of resources for the expanding public sector. So a sort of adhocism works. Sc whether the size of public debt incurred in the past is a positive or negative factor in relation to incurring of public debt in the present is an empirical question. It may work positively and negatively both ways and the resultant may be the mixture of both and hence the more predominant factor may bias the result positively or negatively as the case may be.

Barro had pointed out that the governments generally wish to maintain a certain optimum tax revenue to national income ratio when public sector outlay is given and the need for additional resources is then satisfied by incurring of more public debt. So the tax-income ratio may also be a relevant factor in explaining the size or the ratio of public debt to national income. Of course, it is not necessary to assume public sector outlay to be constant. Thus in our empirical investigations regarding the economy of Jordan, we wish to work with the modified version of Barro.

It is also to be noted that as the general price level increases, the need for resources, increases further and hence public debt incurred also gets enhanced. So the rate of change of
the price level is another relevant factor in this respect. Instead of examining public debt as such, it is better to take into account its proportion to national income which can be represented by \( \frac{PD}{Y} \) where \( Pd \) indicates private public debt and \( Y \) shows national income. When we take into consideration the public sector outlay, it is always better to take into account real public sector outlay. It will be still better if we take stock of per capita public sector real outlay which may be symbolised by \( \frac{RPSE}{P} \) where \( RFSE \) represents real public sector expenditure and \( P \) the denominator represents population. Public debt incurred in the past should be real public debt and it may be considered with one year time lag. So it can be symbolised as \( (RPD)_{t-1} \) where \( (RPD)_{t-1} \) indicates real public debt with one year time lag.

The tax-income ratio also can be viewed with one year time lag and it may be represented as \( \frac{T}{Y} \) where \( T \) is total tax revenue and \( Y \) is national income.

Rate of change of the general price level \( \frac{P_t - P_{t-1}}{P_{t-1}} \) may be represented by the symbol \( \frac{RPC}{P} \) which means the rate of price change in relation to the period of time. So the model will be as follows:

\[
\frac{PD}{Y} = \{ \frac{RPSE}{P} \} t, (RPD)_{t-1}, (I/Y) \ (RPC) \}.
\]

After becoming clear about the secret of development and the role of public debt, we should bring them together in the context of the Jordanian economy. This is attempted in next chapter.