The Relationship between Federal Government Revenue and Expenditure

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The relationship between government expenditure and government revenue has attracted significant interest due to its impact on Budget Deficit

In this regard the causal relationship between government revenue and expenditure has remained an empirically debatable issue in the field of public finance.

On the theoretical front, several hypotheses have resulted from the causal relationship between government revenue and government expenditure

The Tax-and-Spend Hypothesis

The hypothesis, suggested by Friedman (1978), and Buchanan & Wagner (1978), postulates that governments raise tax revenues before undertaking new expenditures. Thus Causality runs from revenue to expenditure.

The Spend-and-Tax Hypothesis

The hypothesis, suggested by Barro (1974) and Peacock and Wiseman (1979) suggests that governments engage in expenditures first and then increase tax revenues to finance these expenditures. Thus Causality runs from Expenditure to Revenue.

The Fiscal Synchronization Hypothesis

The hypothesis, proposed by Musgrave (1966) and Meltzer & Richard (1981), predicts that governments take decisions about revenues and expenditures simultaneously implying a bidirectional causality.

The Independence Hypothesis

The fiscal independence regarding the decisions to spend and raise revenues is also a possible hypothesis proposed by Baghestani and McNown (1994). Thus no causal relationship exists.

Implications

If the first hypothesis holds, budget deficits can be controlled by implementing policies that stimulate govt revenues.

The second hypothesis will result in the outflow of capital because of the fear of paying more taxes in the future.

The Last hypothesis can cause high budget deficits should government expenditure rise faster than govt revenue.

Objectives

To Look at the trends and characteristics of Federal Revenue and Expenditure.

To test the causality between revenue and expenditure and tests the validity of the various hypotheses in Pakistan

Data:

Annual Data from 1978-79 to 2008-09

Variables:

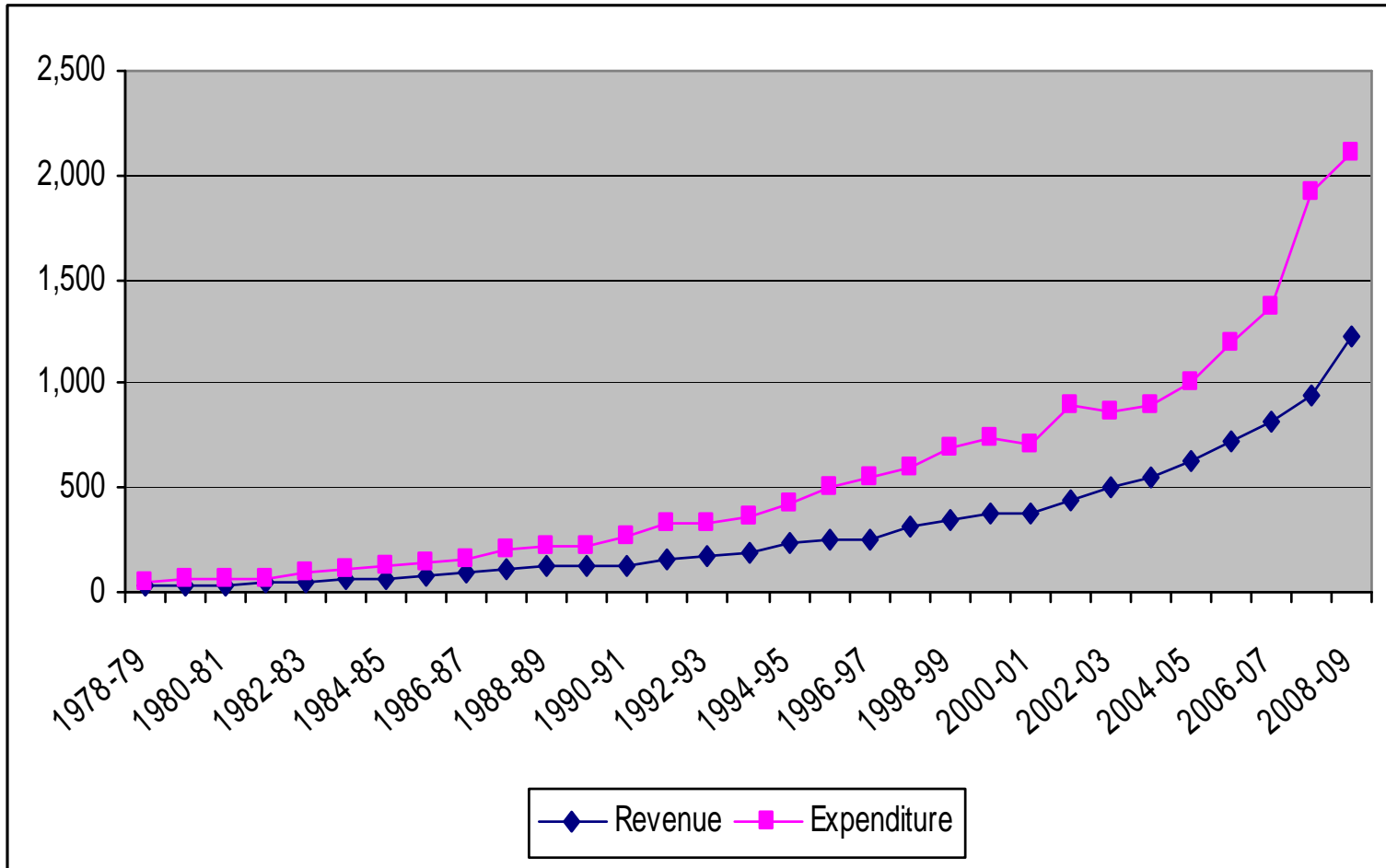Total and Net Revenues as well as Total and Current Expenditures of the Federal Government

Methodology:

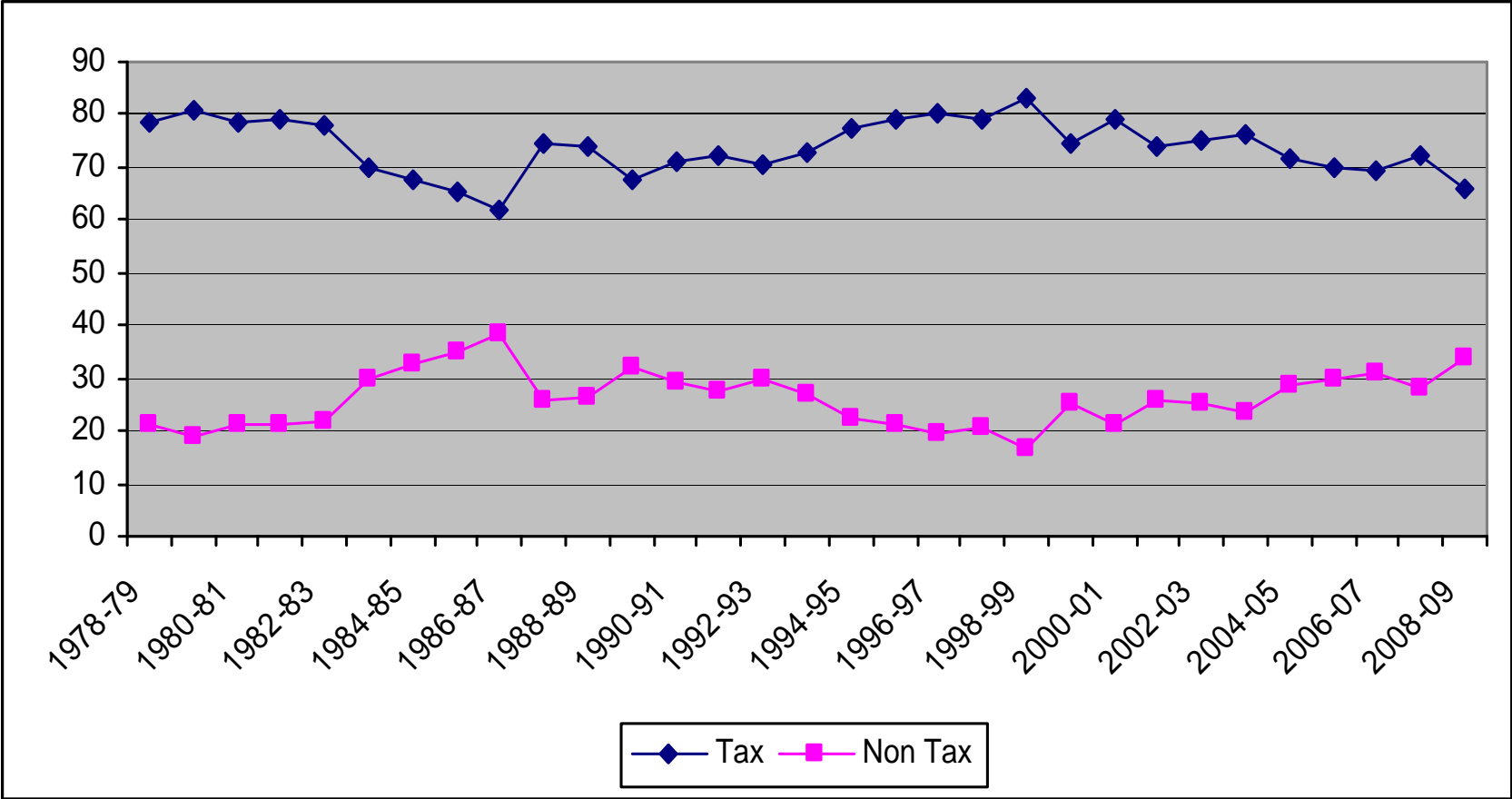Graphs and Causality Analysis by Toda and Yamamoto (1995)
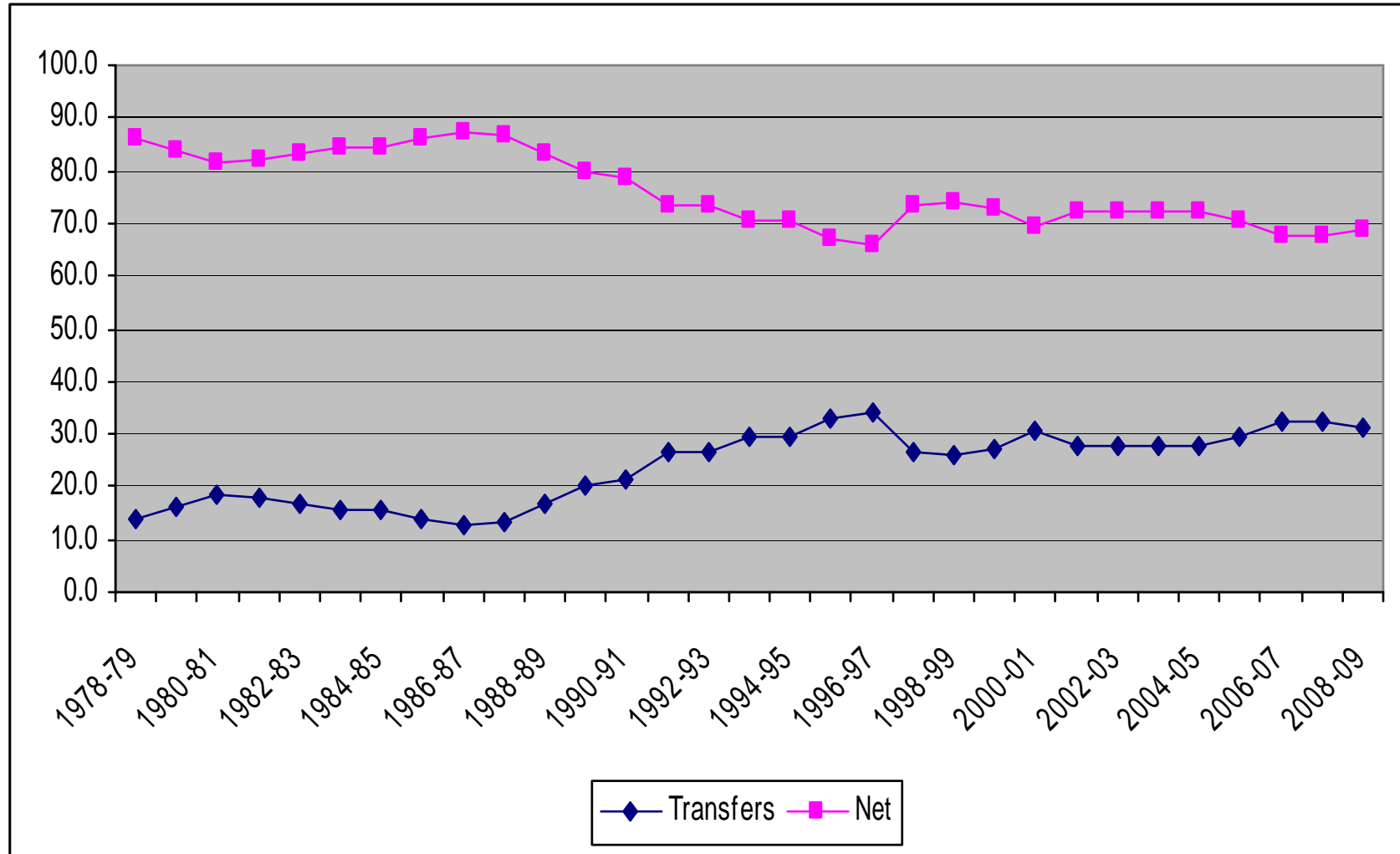
Source:

Hand book of Pakistan's Economy by SBP

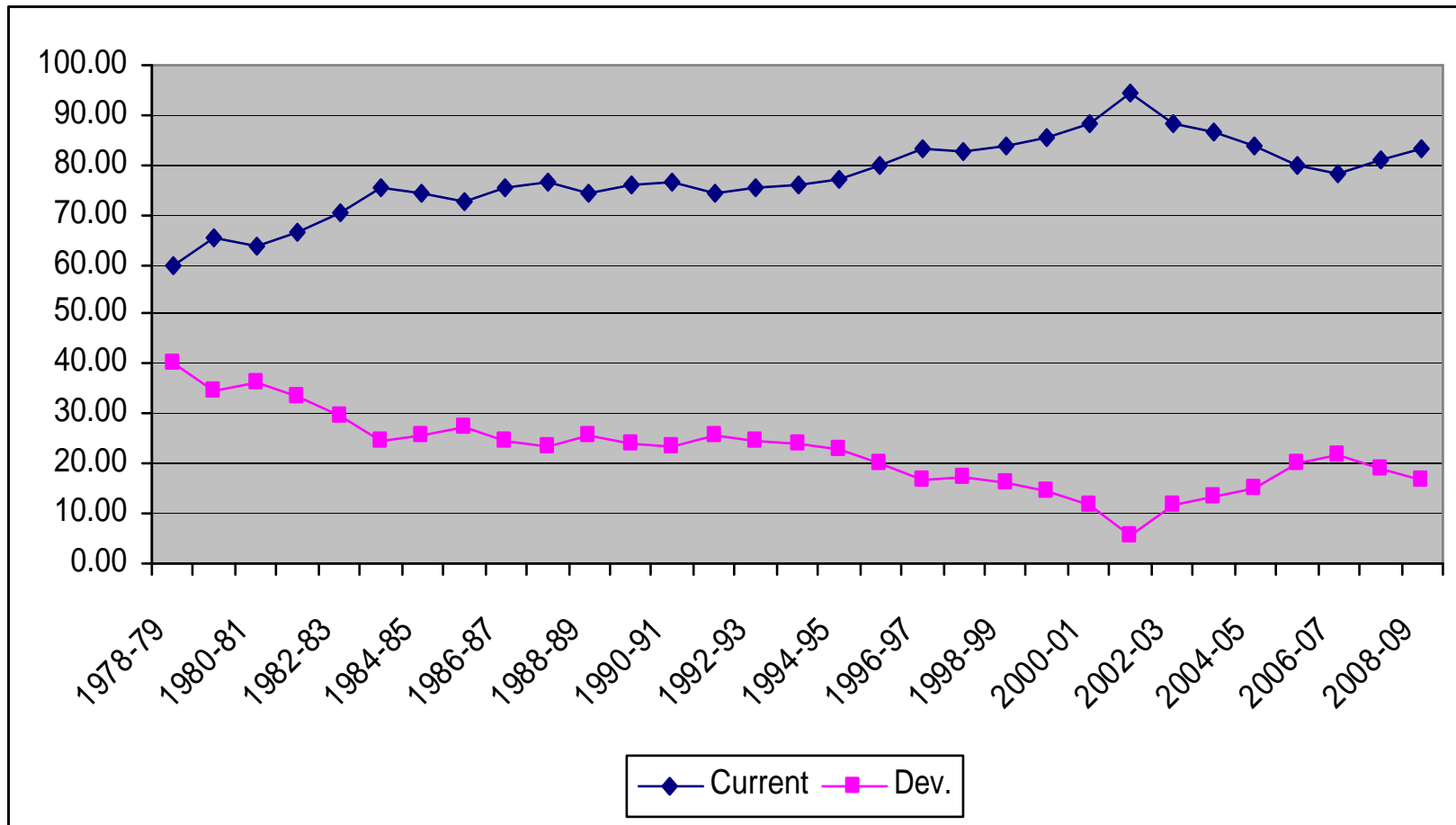# Federal Budget (Rs in bill)

Legend: ◆ Revenue ■ Expenditure
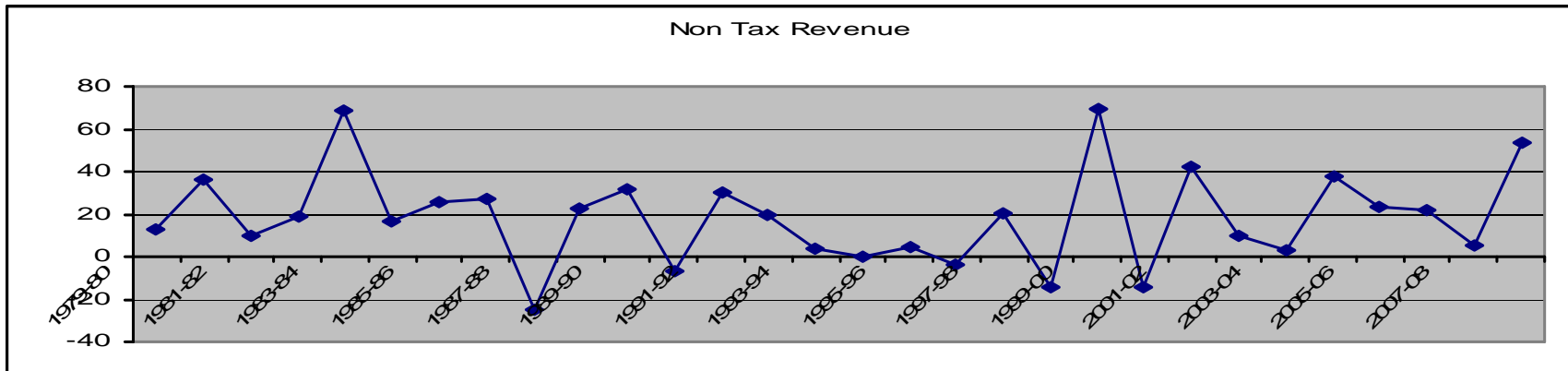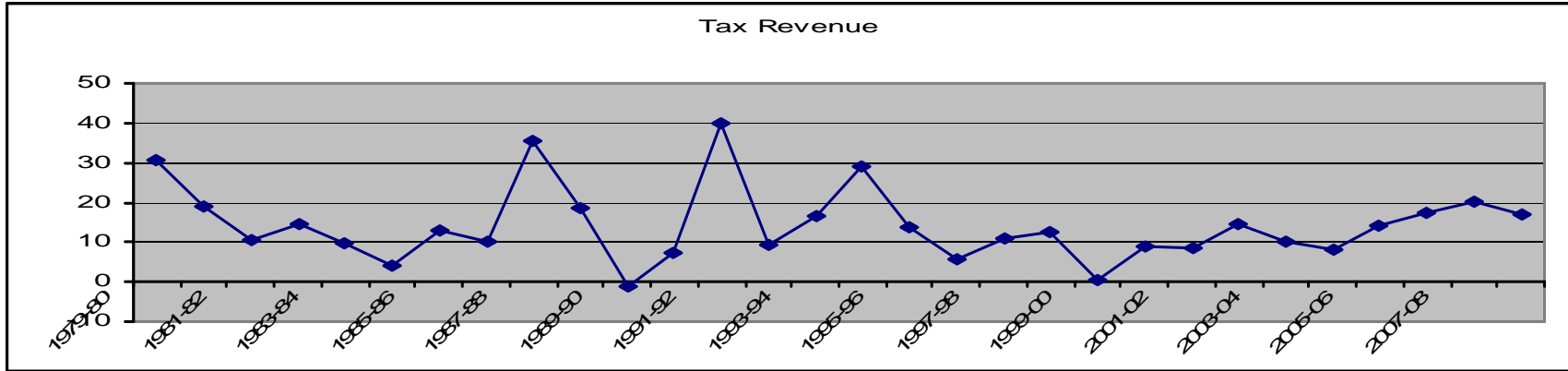
Composition of Federal Revenues by Tax and Non Tax

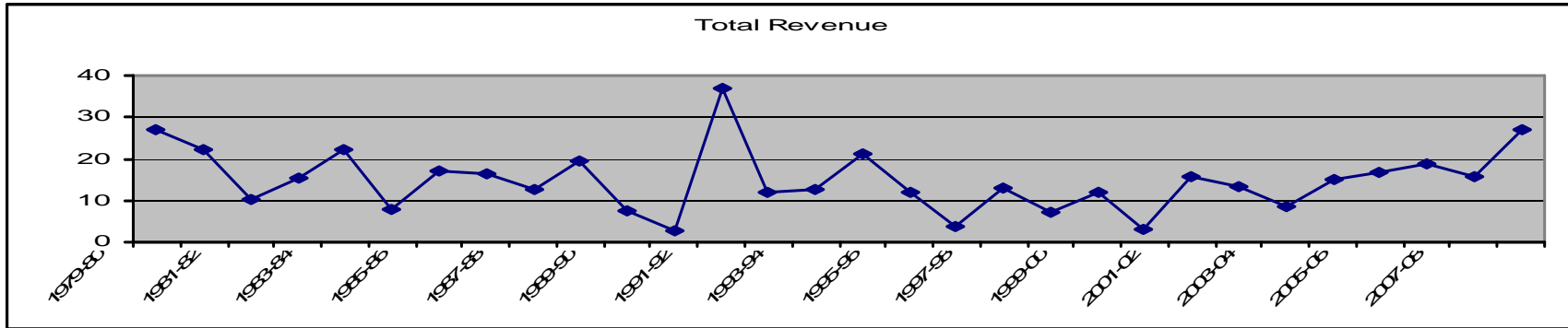**Composition of Federal Revenues by Transfers and Net**

Legend: ◆ Transfers   ■ Net

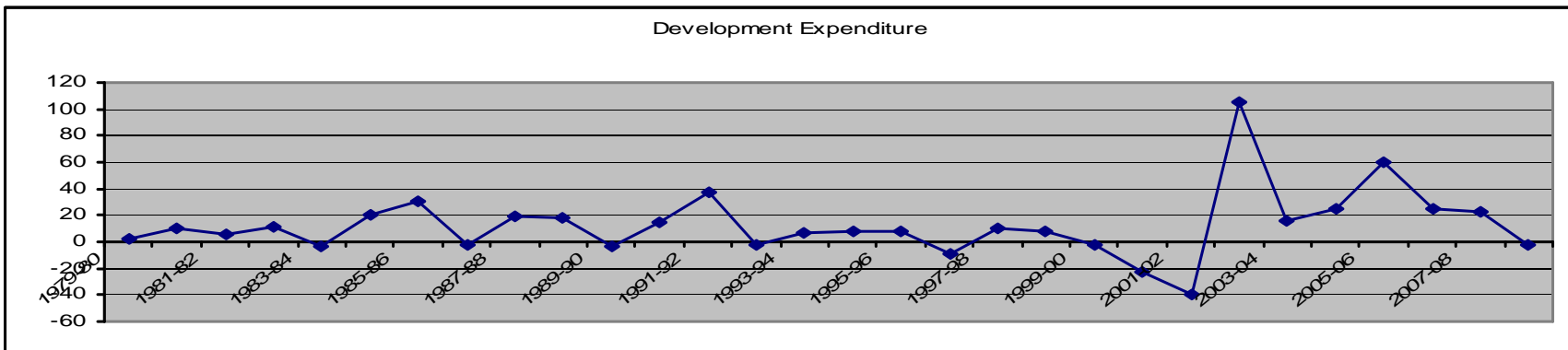# Composition of Expenditures by Current and Development

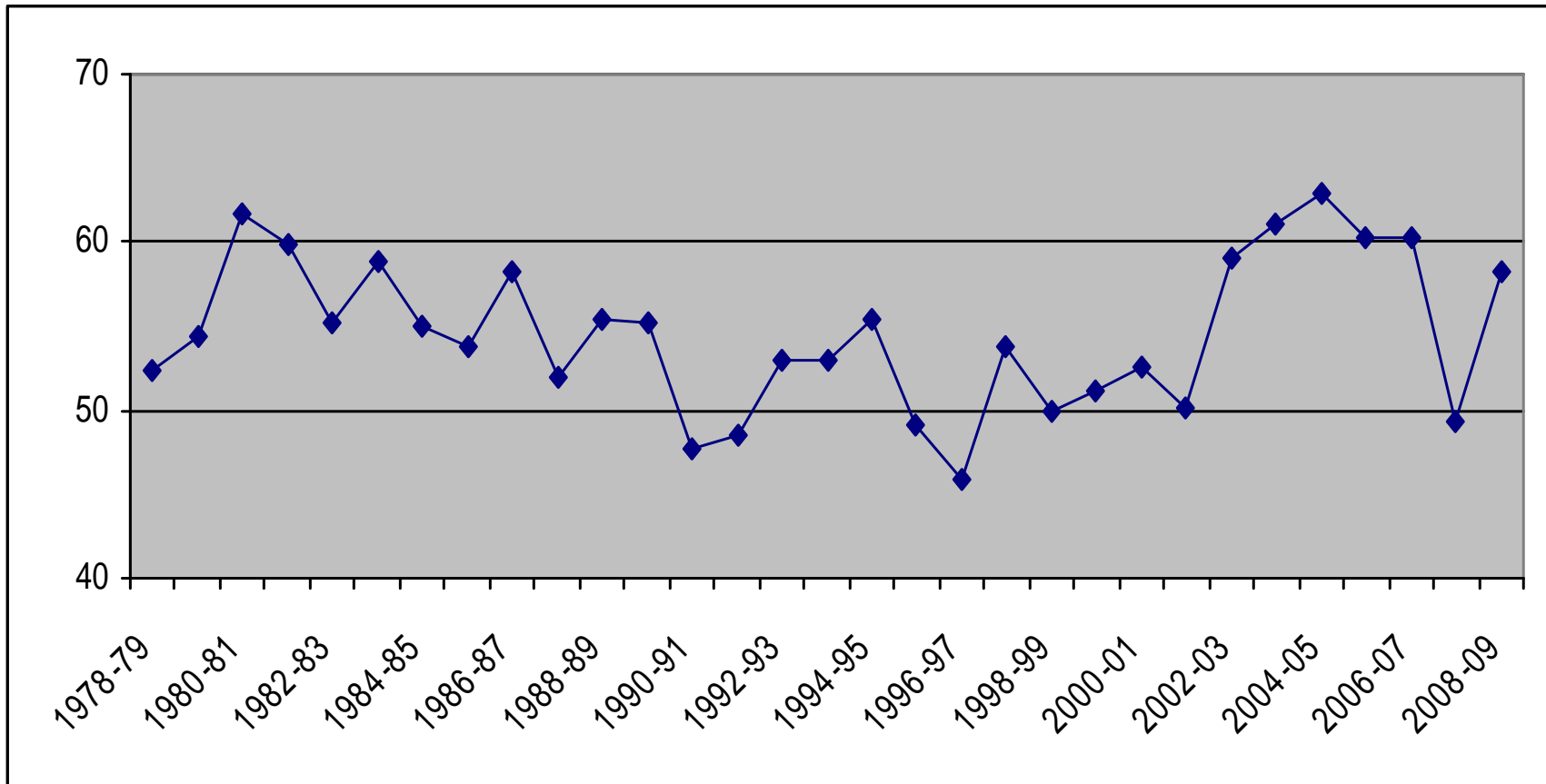Legend: Current — Dev.

Percentage Changes

Total Revenue

Tax Revenue

Non Tax Revenue

Percentage Changes

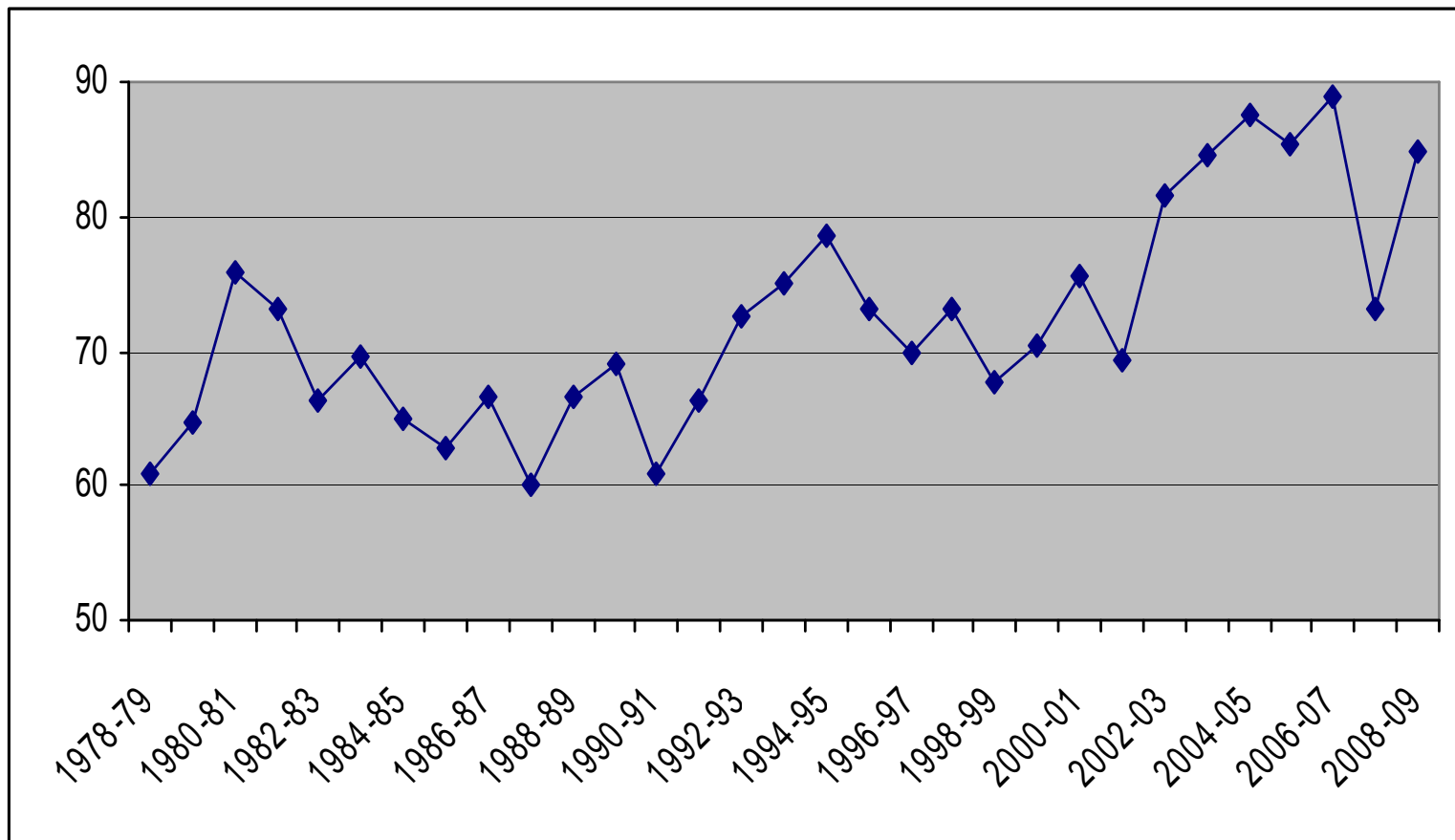## Total Expenditure

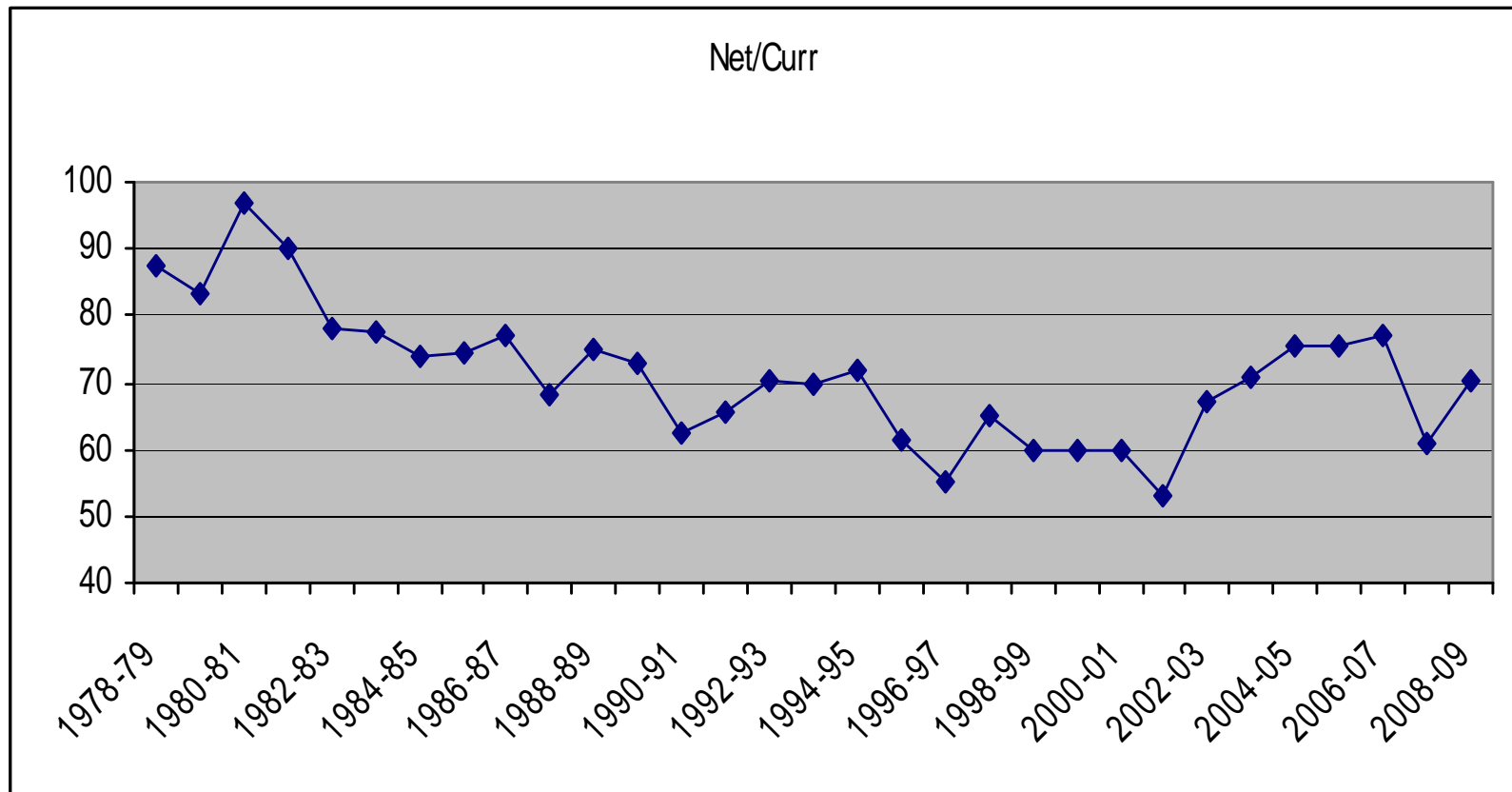## Current Expenditure

Development Expenditure
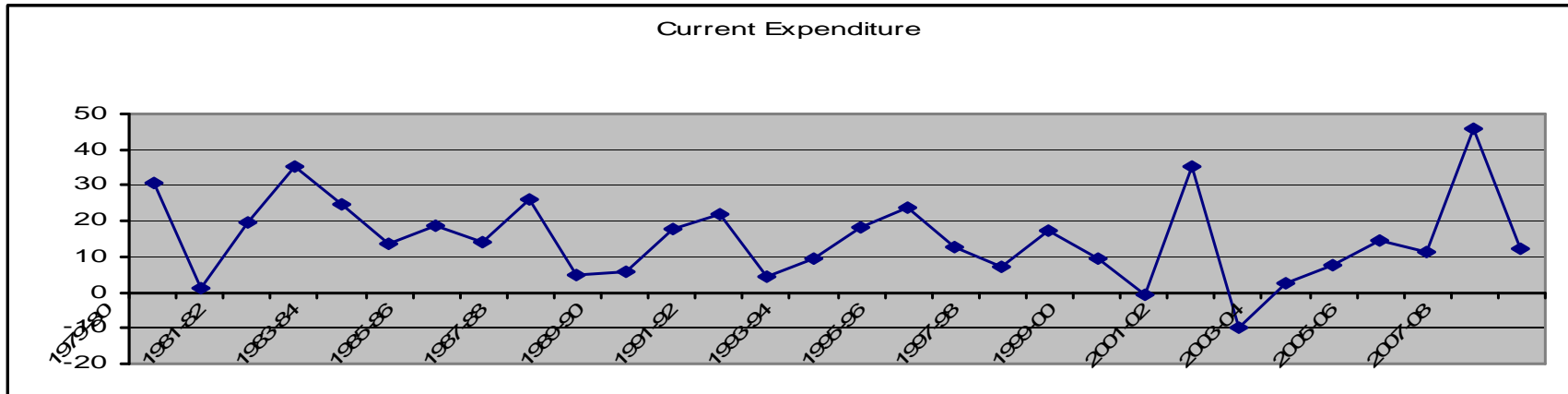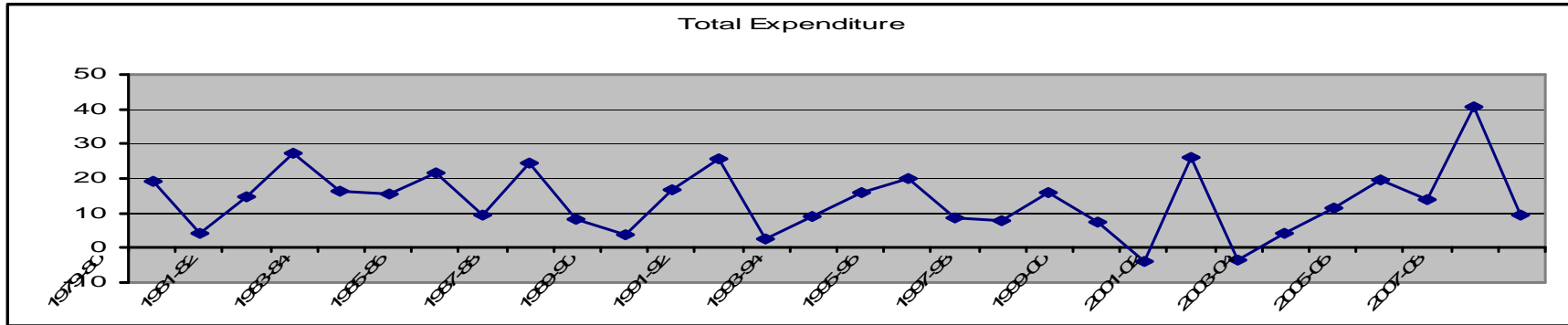
Finances Total Expenditure by Net Revenue

Finances Total Expenditure by Total Revenue

Finances Current Expenditure by Net Revenue

Causality Analysis by TY(1995)

Dependent Variable: Total Revenue

Variables	Coeff.	t-values	Prob.
Const.	-5.883	-0.878	0.389
TR(-1)	0.859	3.830	0.001
TE(-1)	0.168	2.340	**0.028**

Dependent Variable: Net Revenue

Variables	Coeff.	t-values	Prob.
Const.	-8.393	-1.350	0.189
NR(-1)	0.664	2.670	0.013
TE(-1)	0.252	3.960	**0.001**

Dependent Variable: Total Expenditure

Variables	Coeff.	t-values	Prob.
Const.	10.277	0.562	0.580
TR(-1)	0.073	0.118	**0.907**
TE(-1)	0.246	1.250	0.223

Dependent Variable: Total Expenditure

Variables	Coeff.	t-values	Prob.
Const.	-9.690	-0.501	0.621
NR(-1)	-0.340	-0.438	**0.665**
TE(-1)	0.500	2.520	0.019

Conclusion:
Unidirectional from Expenditure to Revenue

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Causality Analysis by TY(1995)

Dependent Variable: Total Revenue

Variables	Coeff.	t-values	Prob.
Const.	4.001	0.552	0.586
TR(-1)	0.705	3.440	0.002
CE(-1)	0.257	4.010	0.001

Dependent Variable: Net Revenue

Variables	Coeff.	t-values	Prob.
Const.	-5.426	-0.845	0.406
NR(-1)	0.467	1.890	0.070
CE(-1)	0.314	5.330	0.000

Dependent Variable: Current Expenditure

Variables	Coeff.	t-values	Prob.
Const.	29.292	1.250	0.224
TR(-1)	1.123	1.690	0.104
CE(-1)	0.234	1.130	0.270

Dependent Variable: Current Expenditure

Variables	Coeff.	t-values	Prob.
Const.	1.048	0.044	0.965
NR(-1)	0.316	0.349	0.730
CE(-1)	0.556	2.570	0.017

Conclusion:
Unidirectional from Expenditure to Revenue

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Unidirectional from Expenditure to Revenue

Implications

The results support the Barro hypothesis for Pakistan, that is, government expenditure causes revenues.

The signal is that government first spends and then, later, to pay for this expenditure, it raises taxes.

Potential investors may construe this government behaviour negatively – that is, investment decisions may take into account the possibilities of paying higher taxes in future.

Implications (contd)

Economic efficiency should be preferred over political determination In determining the new outlays.

Expenditure reform curriculum involving comprehensive cost benefit analyses may be considered

Thank You