



BUDGET AND POPULATION ISSUES IN DEVELOPING COUNTRIES - THE CASE OF NIGERIA

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Abstract

The paper is concerned on the effects of population age-structure and changes on the size of budget estimates of national governments. It determines whether distinctions in age composition can account for the pragmatic differences in budget deficits across countries as well as across period of time. Through an extension of the unproven theory of negative bequest motives as found in the works of Cukierman and Meltzer (1989), the paper provides that the commonly accepted view that population ageing tends towards enhancing the budget deficits of economies is theoretically in consonance with present situation. Results across nations using time fixed-effects and panel regressions, from 1975 to 1992 across 55 developed as well as developing countries shows statistical evidence for this postulation is found to be present only in developing countries but not in the developed countries. Using Nigeria as a case study, the paper further confirmed the existing empirical evidence. Therefore, a need for sharing experiences in these areas with developed countries that can benefit African countries.

Keywords: Budget, Budgetary Control, GHO, CIMA, Dependency Ratio, Budget Deficit, World Bank

INTRODUCTION

This paper focuses on the effects of population age-structure changes on the size of the budget of national governments. It determines whether distinctions in age composition can account for the pragmatic differences in budget deficits across countries as well as across periods of time. Through an extension of the unproven theory of negative bequest motives as found in the works of Cukierman and Meltzer (1989), the paper provides that the commonly accepted view that population ageing tends towards enhancing the budget deficits of economies is theoretically in consonance with the present situation. Results across nations using time fixed-effects and panel regressions, from 1975 to 1992 across 55 developed as well as developing countries show statistical evidence for this postulation is found to be present only in developing countries but not in the developed countries. This paper is however divided into four sections. Section one is this short introduction. Section two deals with the various concepts of budget, types of the budget as well as preparation of budget vis a vis the 2020 Nigeria's budget allocations Section three contains the population age structure and the budget deficit. Section four concludes the section.

CONCEPTUAL DEFINITIONS

Concepts of Budget, Types of Budget and Preparation of Budget

A public sector budget is used as an instrument to allocate public resources toward achieving some public value. Public decisions must equate the cost of public action against the worth of the activity to society. Fisher, Dombush and Begg (1995) define budget as "a description of spending and financing plans of an individual, a company or a government". CIMA (2005) official terminology defines budget as "a plan quantified in monetary terms prepared and approved prior to a defined period in time, usually showing planned income to be generated and/ or expenditure to be incurred during that period and the capital to be employed to attain given objective.

On a general note, a budget is a financial plan that serves as a formal statement of revenue and expenses of an Organisation. A budget provides a time frame for decisions about the services and activities. It provides indications of revenue flows. Budgets have three general functions; budgeting; control accountability and evaluation. There are three types of control: a) expenditure control; b) accountability for purposes of management and efficiency; and c) evaluation for purposes of monitoring, assessing and planning for future service requirements Control constraints. At the levels of local government, public budgets were originally designed to prevent pilfering. This is important because Budgetary control acts as a deterrent against misappropriation of funds.

Control assumes that expenditure must agree with appropriation. Control as a function of expenditure is important in preserving audit trail. An audit trail is a sequence of documents—invoices, receipts, cancelled checks, and so on—that permits an outside observer—such as a government or non-governmental auditor—to reconstruct the transaction to determine whether the money was spent as it was intended.

Considering the principle of fiscal accountability, as noted, this principle applies to private goods but is often suspended when we are speaking of public goods. Nevertheless, public goods involve public expenditures; consequently, there must be some accountability.

Types of budgets for planning and control

Various types of budgets are used by the public sector for planning and control purposes; the more popular ones in use are fixed and flexible budgets, although some businesses use others such as the rolling, incremental or zero-based approach to budgets.

a) Fixed Budget

This is a budget based on one level of activity to which various costs relate. Thus, material, labour, and overhead costs are related to one level of activity. Control of costs is difficult with a fixed budget. This is because when actual activity varies from budgeted activity, then the cost of the budget to the variance of the actual costs is measured and calculated for firms' becomes meaningless.

b) Flexible Budget

This a budget that shows several levels of activity; it is similar to a series of fixed budgets. Flexible budgets recognise the different behavioural pattern of costs in relation to the various output levels. This type of budget may be useful before the specific budget period in assisting the organisation to choose a level or levels for planning periods. They are particularly useful for control purposes as budgeted costs would be available for comparison and control purposes with the actual output achieved.

c) Rolling Budget or Continuous Budget

This is more often used for short term budgeting. The budget is continuously updated by rolling one new period on and rolling the oldest period off. This budget is sometimes used by the organisation for cash budgeting as one new cash period is “rolled on” and the oldest period is “rolled off”.

d) Incremental or Zero or Zero-Based Approach to Budgets: This is more popular in practice. The budget figure for the next period is altered bearing in mind the actual outcome in the current budget period and the projected changes for the new period, e.g., a budget may be altered to allow for wage or salary increase or the introduction of new machinery. If for instance,

administrative salaries are expected to increase by 6%, the budget is to allow for this increase which means that there will be an increase in overheads to allow for the additional expenditure on the additional cost.

In a Zero-based approach, the activities are re-evaluated so that the organisation has to justify the expenditure to take care of the new situation. The Zero-based approach asks:

- i) Why is the cost or activity necessary in its present form?
- ii) Are these activities or costs alternatives?
- iii) Will these alternatives affect product quality or product service?
- iv) Will these alternatives affect the relationships and inter-relationships with other costs and activities?

Stages of Budget Preparation

There are five stage - processes to budget preparation. These are:

1. Creation of plans for functional management areas and coordinated inside a defined future time period.
2. A money value attached to some of these plans which are revenue and expenditure plans.
3. The agreed plans are communicated to the various officers responsible for budget or cost centres.
4. The actual performance of the budget or cost centre is calculated at regular intervals and variances against budget are highlighted and forwarded to the various officers in charge.

Budgeting System and Preparation for Planning and Control

There is an objective to be achieved and the budget reflects the policy and /or plans to achieve this objective. It is made in relation to a definite time period usually one year. It is a comprehensive and co-ordinated, controlling and integrating the activities and programmes of numerous sub-units of the organisation. As a result of this, the budgeting process becomes a systematic and formalised approach in accomplishing the planning, coordination and control responsibilities of organisations and remains an essential element of an effective administrative and financial control system.

The concept of budgeting should be adopted to ensure the support, confidence, participation and performance orientation at all levels of organisational management. If the budgeting system is to be meaningful and effective, it is necessary:

- a) To create budgets which are realistic and attainable with managerial effort. Budgets which are virtually impossible to achieve tend to create organisational dissatisfaction.

- b) That actual performance is measured when it occurs.
- c) That a comparison is made between actual performance and budgeted performance and variances identified.
- d) That organisation should take effective actions on the adverse variances which are controllable. However, budget is only a yardstick by which actual results can be compared as and when they occur and provide an organisation with an aid to control costs. Budgeting does not serve as a control mechanism.

To help planners create the most accurate budgets, the budget preparation process can be integrated with all relevant office applications, such as Controlling and Human Capital Management. This integration allows planners to extract operational data and retract planning results into the operational system, ensuring the system wide availability of the most current planning data. Managers can track the planning process using the system's status-reporting and status-monitoring features.

Budget Preparation

- Estimates by departments and Budget directors
- Consolidation and dept. hearings
- Executive approval
- Submission of budget to the legislative body

Legislative Enactment

- Budget committee consideration
- Hearings, considerations, recommendations
- Adoption of budget by the passage of the appropriation

Reporting and Post Audit

- Interim and year-end financial and statistical reporting
- Audits, reviews, proposals

Budget Execution

- Administration of revenues, personnel, purchasing...
- Accounting
- Budget Cycle

Key budget preparation features of SAP for Public Sector include:

- Status Monitor allows planners to structure hierarchical interdependencies throughout the budget preparation process for top-down or bottom-up budgeting. The monitor also lets planners track the budget planning process, ensuring among other things that deadlines for entering budget estimates are met.

- Powerful simulation capabilities allow planners to perform queries that range from simple ones to complex “what-if” analyses. For example, the system allows a planner to determine the impact of raising material expenditures by percent. More complex strategic simulations with multiple variables – such as “determine the budget impact if the economy grows by x percent and the population shrinks by y percent” – can also be executed.

POPULATION AGE STRUCTURE AND THE BUDGET DEFICIT

Recognition of the Problem of Population Ageing

It has been a traditional notion that a country's demographic factors have little effect on the macro economy. However, in recent times, demographic effects on the economy have been receiving much more attention. The new interest in population economics is largely in response to the overwhelming concern with population ageing.

Population ageing, the demographic phenomenon which entails an increase in the percentage share of the elderly in the total population was previously associated only with the developed countries. (Bloom et al, 1997) In recent times, trends of declining fertility rates have been a dominant cause of population ageing, thus, surfacing in the developing and less developed countries as well. While it is true that population ageing in these developing and less developed countries is still in the relatively early stages, the projected rates of increase of these elderly populations for the near future, on the other hand, is staggering. Up to 2025, Asia and Latin America are expected to have the largest percentage increases in the share of the elderly population. (Bloom et al, 1997). This is most disconcerting as it implies that these developing countries will be achieving levels of population ageing at much lower levels of per capita income than the industrialised countries of the world, and may therefore not have sufficiently developed social security programmes for universal attainment.

While the growth of the elderly share for many countries is projected to increase, the growth of the share of working-age populations has been projected to decrease. (Bloom et al, 1997). These declines arise from the combined impact of low fertility rates on the working-age population entrants and the maturation of large cohorts into retirement. In addition, the labour force participation rates of men both above and below the normal retirement age have fallen sharply (OECD, 1988). The above effects would reduce the size of the labour force and as such, given present trends, there will not only be a larger elderly population to be supported but also a smaller working population to support it. This implies that the burden shouldered by each working person is likely to increase substantially in the near future. If this trend goes unchecked, population ageing could very well lead to the collapse of many pay-as-you-go social security systems in the world in the early part of this century.

Thus, population ageing, being a global phenomenon, is causing deep concerns in both the developed and developing countries. As a result, many types of research in demographic economics have been performed in the hope of finding a way to avert the impending old age crises.

Population Age Structure Changes and the Budget Deficit: The Effects of the Elderly Share on the Budget Deficit

An unexpected rise in the population share of the elderly due to improved longevity tends to increase the budget deficit because this will increase the number of social security benefits that are paid out to the elderly by the government. Such social programs are largely financed by taxes and social security contributions collected from the working population. As long as the size of the elderly population in relation to that of the working population increases with the elderly share, *ceteris-paribus*, the benefits that are paid out will definitely exceed the revenue collected for such programmes. This consequently means that the government, in order to keep such social programs viable, must increase the level of taxes and social security contributions being collected from the working population or decrease the level of social security benefits being paid out to the elderly, or run a budget deficit by financing some of the social security benefits by bond issuance.

Population ageing also tends to lead to an increase in the government deficit by increasing the government's expenditure on health care. Surveys conducted in OECD countries show that public expenditure on health care is significantly higher for older persons than for the remainder of the population (1988). This is predominantly due to health problems and costly medical technologies being concentrated on the old. As such, an increase in the share of the aged generally leads to an increase in government expenditure on public health care services, which consequently, with a given level of tax revenue, is likely to increase the budget deficit.

In short, an economy with a larger elderly share of the total population tends to have a larger budget deficit because of the tendency of increased social expenditures on health and social security and also because of lower per capita income due to a lower level of labour and capital inputs into the economy.

The Effects of the Youth Share on the Budget Deficit

Similar to that of the elderly, an increase in the share of the youth in the total population tends to have an effect of increasing the budget deficit. With a larger share of the population as young persons, public expenditures by the government which is specifically directed at the youth, such as education expenditures, will increase.

Again similar to that of the elderly, a larger youth share will also imply that there are relatively fewer workers and savers in the economy. As a result, the levels of per capita labour inputs and investment will be less, leading to a lower level of per capita income and income tax revenues and a larger budget deficit.

Bloom and Williamson (1997) postulated by empirically demonstrating that an increase in the growth rate of the share of the dependent population, which includes both young and elderly persons, have the tendency to decrease the rate of per capita income growth because of the young and elderly work and save less. In an empirical study that covers over 80 countries, Kelley (1988) opines that increases in the elderly share lead to statistically significant decreases in aggregate rates of saving.

Dependency Ratios and the Budget Deficit

It is very common to study the variations in the youth and elderly dependency ratios as indicators of changes in the age structure of the population instead of looking at the different age-group shares of the population,

The elderly dependency ratio represents the size of the elderly population relative to that of the working-age population and has been projected to increase in all major regions of the world due to the effects of population ageing. Similarly, the young or youth dependency ratio is the number of young persons in the population divided by the number of persons in the working-age population.

Other Variables and the Budget Deficit

Before indulging in an empirical investigation as to whether the issue of changes in age structure is significantly behind the size of a country's budget deficit can be carried out such political, as well as structural variables that have a great effect on the size of the deficit, must be first accounted for. There are four other main classes of variables that have been suggested in the literature to have significant effects on the size of the budget deficit of a country (Alesina, et al., (1995). They are

- i. Structural variables that determine or reflect the level of efficiency of the tax system in a country,
- ii. Macroeconomic variables,
- iii. Political variables representing the level of political instability and political polarisation in a country, and
- iv. Tax-smoothing variables.

Macroeconomic Variables

Level of Economic Development: To control for the potential effects of economic development on the cross-country differences in budget deficits, several different measures of the level of per capita real GDP will be used. Possible measures include real GDP per capita and a measure of potential or trend real GDP per capita.

Accounting for Money Creation: Therefore, if a country runs a large budget deficit and finances it by monetizing it, the bequest motive theory provides no explanation as to why the budget deficit should arise. This is because monetization of issued or retired and the amount of money created. , Singapore has been generally running budget surpluses since the 1980s; while, its stock of government debt has been increasing. By implication, the government of this country has decided not to offset its debts over time, In fact, it has chosen to borrow even more, in spite of accumulating large government reserves due to the many years of budget surpluses.

The budget deficit can be defined as the sum of the different ways in which it can be financed. Budget deficits can be financed in two ways namely borrowing from the public or by seigniorage, thereby having a formula thus, Budget Deficit = un-monetised Debt Issue added to Change in Base Money Accounting for Interest Payments on Government Debt:

Interest rates are an important factor in determining governments' costs of debt servicing. Naturally, the costs of debt servicing become more important in countries that have a large stock of government debt, such as Belgium, Ireland, and Italy. We will use the measure of the budgetary costs of higher interest rates presented in Roubini and Sachs (1989), which is the annual change of the difference between the real interest rate and the real growth rate, multiplied by the lagged debt-GDP ratio.

Political Instability: Political instability has been found to play a significant role in the determination of the size of the budget deficits. Edwards and Tabellini (1991), postulate that the more politically unstable a country is, the larger will be its budget deficit. Political instability will raise the frequency of government changes and lower the likelihood that a current policymaker will be Re-elected. Given this, consider a policymaker who is required to choose both the Inter temporal profile of spending and taxes as well as how to allocate the resources acquired by issuing debt. Due to the fact, that there exists political instability in the country and that in the future fully aware that the policymaker may be replaced by political majority with different preferences about some aspects of fiscal policy. Then he realizes that, whereas he is in control of how to allocate the proceeds of his borrowing, the allocation of the burden of repaying the debt in the future may not be under his control. However, it is noted that a country that is politically polarized may not be politically unstable. For instance, a country can have two

different or polarised political ideologies and yet be politically stable if the supporters of one of the political ideologies form the vast majority of the voter population, assuming majority rule. For this reason, we have decided to omit the concept of political polarization in our presentation of political instability as a significant determinant of budget deficits.

This asymmetry may prevent the current policymaker from fully internalizing the costs of running a deficit, the more so the greater is the difference between his preferences and the expected preferences of the future majority. In simple terms, the policymaker may wish to borrow in excess of the optimum and let his successors "pay the bills". Thus, political instability and polarization tend to lead to a larger than the optimal size of the budget deficit, even if the policymaker and the voters are rational and forward-looking.

Tax-Smoothing Variables: Neoclassical theory of economic policy is represented by the tax smoothing or equilibrium approach to fiscal deficits. According to this approach, advocated by Barro (1979), actual tax and deficits policies are a reflection of an inter temporal optimization over a long time horizon by the fiscal authorities, which choose their policies to scale back the surplus burden of taxation. It is shown that the surplus burden of taxation is minimized when the rate is constant in every period. As a consequence, budget deficits and surpluses are postulated by the theory to act as buffers to unanticipated and transitory changes in government expenditures or output. When budget deficits are run, the tax-smoothing approach would argue that the economy is perhaps facing unexpected increases in government expenditures or unexpected decreases in output.

On the other hand, if governments were running budget surpluses then tax-smoothing advocates would argue that the economy is experiencing unexpected decreases in government expenditures or unexpected increases in output. This implies that increases in unanticipated changes in government expenditures should lead to increases in the budget deficit. On the other hand, increases in unanticipated output should lead to decreases in the budget deficit.

3.4 Population Ageing Issues in Africa One positive step concerns the adoption, in April 2001, of an Organization of African Unity (OAU) Policy Framework and Plan of Action on Ageing. This document will help to focus attention on ageing issues and guide African countries in the design, implementation and monitoring of integrated policies and programmes on the needs of the elderly. Some issues addressed by the OAU document include: rights, information and coordination; poverty, health, food and nutrition; housing and living environment; family, social welfare, employment and income security; emergencies and epidemics; education and training; and gender.

Another important issue is HIV/AIDS. In 2000, more than 2.4 million Africans died of AIDS, and 3.8 million became infected. AIDS is now the leading cause of death, and the elderly

are entrusted with parenthood and the care of sick relatives, even though their own situations are precarious. In absolute figure, South Africa (7.1 million), Nigeria (3.2 million), and India (2.1 million) had the highest HIV/AIDS cases as at the end of 2016. Nigeria has a high HIV rate above 1% and is said to be having Generalized HIV Epidemics (GHEs) (UNAIDS, 2018). According to Global Health Observatory (GHO) Data, about 770 000 [570 000–1 100 000] people that died from HIV globally in 2018 were 56% fewer than in 2004 and 33% lower than in 2010 in spite of a period of considerable population growth in many high burden nations.

There is no room for self-satisfaction. Nations are expected to live up to their obligation to end the AIDS epidemic as a public health threat by 2030 -- a target included in the 2030 Agenda for Sustainable Development adopted by the United Nations General Assembly in September 2015 (GHO, 2019). Issues such as institutional care for the elderly, pension schemes and appropriate health care are now being given attention in most African countries. For instance, in Nigeria, there are various policy aimed at providing for the largely unemployed youths and the elderly like NPOWER and Trader Money. This explains the reason adduced to the enormous deficit budget recently passed into law in the country.

President Buhari, on the 17th December 2019 signed the 2020 budget into law amounting to \$34.62 billion budget equivalent to N10.59 trillion. The breakdown of the budget revealed that recurrent expenditure alone accounted for more than 40% of the annual budget amounting to N 4.8 \$34.62 billion budget equivalent to N10.59 trillion. The breakdown of the budget revealed that recurrent expenditure alone accounted for more than 40% of the annual budget amounting to N 4.842trn ([Http://www.budgetoffice.gov.org.2020](http://www.budgetoffice.gov.org.2020) budget). This huge amount has been attributed to an attempt to provide for the cost of various social security funds meant for the increasing population of both the young and the aged in the country. There is thus a need for sharing experiences in these areas with developed countries that can benefit African countries.

CONCLUSION

In view of the wide-spread concern with regard to population ageing leading to the government expenditures of many countries to be unsustainable in the near future, this paper attempts to assess the severity with which changes in population age structure affect the deficit of national central governments. Based on the literature and practical experience of countries, there is some evidence that increases in the elderly and youth population shares tend to increase the budget deficit, but this is only applicable in developing countries. In addition, there's some indication that these age-structure effects on the deficit occur as a consequence of negative bequest motives.

However, there should be scope for further studies in relation to this paper. Empirical analysis will be necessary in order to help immensely in establishing relationship between budget and population issues as it relates to developing countries with special reference to Nigeria.

REFERENCES

- Aizenman, Joshua (1987). "Inflation, Tariffs and Tax Enforcement Costs." *Journal of International Economic Integration*. Vol. 2, No. 2, pp 12-28.
- Alesina, Alberto and Roberto Perotti (1995). "The Political Economy of Budget Deficits." *IMF Staff Papers*. Vol. 42, No. 1, March
- Anderson, Gary M. (1986). "The US Federal Deficit and National Debt: A Political and Economic History." In *Deficits*, edited by James M. Buchanan, Charles K Rowley and Robert D. Tollison, Basil Blackwell Inc, pp. 9 – 46.
- Barro, Robert J. (1974). "Are Government Bonds Net Wealth ?" *Journal of Political Economy*. Vol. 82, No. 6, pp 1095-1117.
- Barro, Robert J. (1979). "On the Determination of the Public Debt." *Journal of Political Economy*. Vol. 87, No. 5, pp 940-971.
- Barro (1991) : "Comments on McCubbins" in *Politics and Economics in the Eighties*. Ed. By Alberto Alesina and Geoffrey Carliner. University of Chicago Press and National Bureau of Economic Research.
- Berg, Andrew and Jeffrey Sachs (1988). "The Debt Crisis: Structural Explanations of Country Performance." *Journal of Development Economics*. Vol. 29, No. 3, pp 271-306.
- Bloom, David E. and Jeffrey G. Williamson (1997). *Demographic Transitions and Economic Miracles in Emerging Asia*. Working Paper, Harvard Institute for International Development, Harvard University.
- Buchanan, James M. and Richard E. Wager (1977). *Democracy in Deficit: The Political Legacy of Lord Keynes*. Academic Press, New York.
- Buchanan, James M. and Jennifer Roback (1987). "The Incidence and Effects of Public Debt in the Absence of Fiscal Illusion." *Public Finance Quarterly*. Vol. 15, pp. 5-25.
- Chen, Derek Hung Chiat (1995). *Ageing and Intergenerational Transfers : The Issues*. (Unpublished) Master's dissertation. National University of Singapore, Republic of Singapore.
- CIMA (2005) "Budgeting Topic Gate way" www.cimaglobal.com/Documents/.../cig_tg_budgeting_mar08.pdf
- Clingermayer, James C. (1991). "An Intergenerational Transfer Model of State Debt Financing." *Public Choice*. Vol. 72, No. 1, pp. 13-21.
- Cukierman, Alex, Sebastian Edwards and Guido Tabellini (1992). "Seigniorage and Political Instability." *American Economic Review*. June, Vol. 82, No. 3, pp 537-555.
- Cukierman, Alex and Allan H. Meltzer (1989). "A Political Theory of Government Debt and Deficits in a Neo-Ricardian Framework." *American Economic Review*. September 1989, Vol. 79, No. 4, pp 713-732.
- Culter, David M., James M. Poterba, Louise M. Sheiner and Lawrence H. Summers (1990). "An Ageing Society: Opportunity or Challenge ?" *Brookings Papers on Economic Activity*. No. 1, pp. 1-73.
- Derek H. C. Chen* "The World Bank" 1818 H Street, N.W. Washington D.C. 20433 U.S.A.
- Diamond, Peter A. (1965). "National Debt in a Neoclassical Growth Model." *American Economic Review*. December, Vol. 55, pp. 1126-1150.
- Edwards, Sebastian and Guido Tabellini (1991). "Explaining Fiscal Policies and Inflation in Developing Countries." *Journal of International Money and Finance*. Vol. 10 (Supplement), pp. S16-S48. 26
- Eisner, Robert (1989). "Budget Deficits: Rhetoric and Reality." *Journal of Economic Perspectives*. Vol. 3, No. 2, Spring, pp. 73-93.
- Elmendorf, Douglas W. and N. Gregory Mankiw (1998). "Government Debt." NBER Working Paper No. 6470, March.
- Fisher, Donbush & Begg (1995) "Communication management in public sectors: the case of the Polish energy sector" journals.openedition.org/cp/553

- Griliches, Zvi (1986). "Economic Data Issues." in Handbook of Econometrics. (Volume 3) ed by Zvi Griliches and Michael D. Intriligator. North-Holland, Netherlands.
- Hoover, Kevin D. and Mark Siegler (2000). "Taxing and Spending in the Long View: The Causal Structure of U.S. Fiscal Policy, 1791-1913." Oxford Economic Papers. (forthcoming)
- Johnson, D. Gale (1998). "Population and Economic Development." Seminar Paper presented at University of California at Davis, November 13, 1998.
- Kelly, Allen C. (1988). "Population Pressures, Saving, and Investment in the Third World: Some Puzzles." Economic Development and Cultural Change. Vol. 36, No. 3, pp 449-464.
- Kristov, Lorenzo, Peter Lindert and Robert McClelland (1992). "Pressure Groups and Redistribution." Journal of Public Economics. Vol. 48, pp. 135-163.
- Lindert, Peter H. (1996). "What Limits Social Spending?" Explorations in Economic History. Vol.33, pp. 1-34.
- Mankiw, G. (1987) "The Optimal Collection of Seigniorage: Theory and Evidence." Journal of Monetary Economics. Vol. 20, pp. 327-342.
- Meltzer, Allan H. (1992). "Measurement, Economic, and Political Issues of Debt and Deficits." In Marvin H. Koters (ed), Fiscal Politics and the Budget Enforcement Act. The American Enterprise Institute (AEI) Press.
- Meltzer, Allan H. and Scott F. Richard (1981). "A Rational Theory of the Size of Government." Journal of Political Economy. Vol. 89, pp 914-927.
- Meltzer, Allan H. and Scott F. Richard (1981). "Tests of a Rational Theory of the Size of Government." In Allan H. Meltzer, Alex Cukierman and Scott F. Richard. Political Economy.
- OECD (1988). Ageing Populations : The Social Policy Implications. OECD, Paris, 1988.
- O'Sullivan, Arther and Steven M. Sheffrin (1998). Macroeconomics : Principles and Tools. Prentice-Hall, Inc., New Jersey.
- Oxford University Press. Ross, Levine and David Renelt (1992). "A sensitivity Analysis of Cross-Country Growth Regressions." American Economic Review. September, Vol. 82, No. 4, pp. 942-963.
- Rosen, Harvey S. (1999). Public Finance. (5th Edition) Irwin / McGraw-Hill, U.S.A.
- Roubini, Nouriel and Jeffrey Sachs (1989a). "Government Spending and Budget Deficit in the Industrial Countries." Economic Policy. April, Vol 8 pp 100-132.
- Roubini, Nouriel and Jeffrey Sachs (1989b). "Political and Economic Determinants of Budget Deficits in the Industrial Democracies." European Economic Review. Vol. 33, pp 903-938.
- Roubini, Nouriel (1991). "Economic and Political Determinants of Budget Deficits in Developing Countries." Journal of International Money and Finance. Vol. 10 (Supplement), pp S49-S72.
- Schick, Allen (1983). "The Distributive Congress." in Schick, Allen (ed.) Making Economic Policy in Congress. Washington D.C. American Enterprise Institute, pp. 257-74.
- Taylor, John B. (1998). Principles of Macroeconomics. (2nd Edition) Houghton Mifflin Company, U.S.A.
- Todaro, Michael P. (1997) Economic Development. (6th Edition) Addison-Wesley Publishing Company, Inc., U.S.A.. Ann Arbor, MI :Interuniversity Consortium for Political and Social Research (distributor), 1997.
- Vaughn, Karen I. and Richard E. Wagner (1992). Public Debt Controversies: An Essay in Reconciliation." Kyklos. Vol. 45, Fasc. 1, pp 37-49.
- www.sap.com/publicsector 50 053 023 (04/04) © 2004 by SAP AG.