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Shifts in the Composition of Government Spending in Response to External Debt Burden

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Summary. — This paper examines the effects of external public debt burden on the composition of public spending in a sample of 47 developing countries for 1972–2001. We specify a system of equations for the relative spending shares of six *economic* categories and estimate it using several estimation methods and samples. We find support for the adverse effect of the debt burden on "capital expenditure" in the full sample and in the Middle East-North Africa and sub-Saharan Africa subsamples where the debt burden was relatively high. Among components of "current expenditure," increased debt burden shifted the shares against "nonwage goods services" and "subsidy and transfers" while leaving the share of politically sensitive category of "wages and salaries" unscathed in most cases.

Key words — developing countries, external public debt, public finance, public spending composition

1. INTRODUCTION

In the past three decades or so, a number of developing countries (DCs) experienced major episodes of financial crisis that were characterized by unsustainable fiscal deficits and rising external debt. The deficits raise the level of external public (and publicly guaranteed debt) through two channels: Directly, they cause more external public borrowing for financing purposes. Indirectly, when coupled with overvalued exchange rates, they encourage capital flight. This, in turn, drains national foreign exchange reserves and leads to "flight-driven external borrowing." [1] Not surprisingly, since the "debt crisis" of the early 1980s, fiscal deficit reduction became a key component of the macroeconomic adjustment programs that many indebted countries had to undertake as a condition for their inclusion in debt restructuring and debt relief initiatives and/or eligibility for the IMF's "rescue packages."

Two main issues arise in relation to efforts aimed at containing the fiscal deficits. The first issue is the distribution of total reduction in the size of the deficit between spending cuts and higher (tax) revenues. It may be argued that, in general, the spending side of the budget is likely to bear a heavier burden of deficit containment than its revenue side. For one reason, spending cuts can be more quickly implemented than measures that can generate more tax receipts. Moreover, raising taxes may be perceived as a policy with distortionary effects and in conflict with reducing the role of government (Woodward, 1992). [2] The second issue is the distribution of total spending cuts among various categories of public spending. Since interest payments on the public debt is a relatively substantial and inflexible component of total public spending, such distribution presents a particularly challenging problem: If spending cuts mainly fall on expenditure categories that affect current income and consumption levels of large segments of population, they will have adverse welfare (poverty) implications. The latter may, in turn, lead to a rise in the levels of public discontent and political instability. On the other hand, if the brunt of spending reductions is borne by categories that maintain and enhance the economy's productive capacity, it may well endanger the long-term

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economic growth.[3] This is particularly true in countries where the public sector is the source of much of total investment in infrastructure and fixed capital.

Concerns regarding the growth and welfare implications of public spending cuts, particularly under IMF-supported adjustment programs, generated many debates. Attempts to shed light on various aspects of these debates resulted in a large body of empirical studies. A relatively small branch of these studies focused on the distribution of the burden of spending adjustment among the relative shares of various functional and economic categories of public spending.[4] Hicks and Kubisch (1984), for example, noted that unlike capital expenditures, social and defense expenditures tended to be well protected during periods of fiscal retrenchment over the period 1972–80. A later study by Hicks (1989), essentially confirmed this finding. After examining the data from a sample of 11 "high-debt" countries during 1978–84, Hicks concluded that the major burden of expenditure reductions fell on the heavily capital-intensive sectors (particularly infrastructure) as well as real wages and salaries of government employees. At the same time, social and defense sectors were sheltered. In a more formal and extensive study, Heller and Diamond (1990) analyzed the data for a large number of DCs over 1975–86. An important finding of their study was that, among the *economic* categories of spending, the shift in spending patterns turned out to be most pronounced against "fixed assets and capital transfers and toward interest, subsidy and transfer payments, given the functional structures of expenditures over the period" (p. 2).

Papagapitos (1992) attempted to address widespread concerns regarding stabilization programs by estimating the impact of various proxy variables for the programs on the share of "developmental expenditure." Using a sample of 25 DCs over 1972–88, he estimated the relative share equations for various *functional* categories of government expenditures. Interestingly enough, he found that "for the most part, stabilization programs do not appear to consistently shift public expenditures away from growth-augmenting areas." (p. 85). Habibi's (1994) study focused on the political dimension of the allocation of total spending among competing functional and economic expenditure categories. His analysis of the data for a cross-section of 67 countries (with 1984 as the reference year) suggested that a higher level of political democratization was associated with a higher relative budget share of "subsidies and other current transfers" and a lower share of "nonwage goods and services."

As its main objective, the present study seeks to investigate empirically the way an increase in the external public debt—directly (through changes in spending priorities) or indirectly (through higher interest payments)—shifted the relative shares of *economic categories* of public spending in a sample of indebted DCs. Our investigation is motivated by the fact that: (a) Debt-induced changes in public spending priorities and their social and economic implications continue to generate debates among professional economists and draw criticisms from nongovernmental organizations (NGOs).[5] (b) The nexus between *public* debt and the *mix of public spending* is an important link in the "causal chain" running from *public debt* to *economic growth* or *welfare*. As such, our empirical examination of this nexus nicely complements the results of several recent studies in which public debt *or* spending composition was directly related to economic growth rate, private investment, or measures of poverty.[6]

Some more specific features of our empirical analysis are as follows: First, we use an updated pooled data set that contains observations for 47 developing countries collected over a time period spanning roughly three decades (1972–2001). The extended time-series dimension of the pooled data set employed here should yield a more accurate assessment of the impact of public debt burden and other variables on the composition of public spending than those reported by Heller and Diamond (1990) for 1978–86. Second, unlike many previous studies, we define various economic expenditure categories in terms of their relative shares in *total government expenditure*. This definition is intuitively more appealing for, as noted by Habibi (1994), fiscal decision makers are likely to be more concerned about funds allocated to a particular spending category as a percentage of total spending than GDP. Third, we test the sensitivity of our results to various ways in which the (unobservable) country- and/or time-specific effects in the pooled data set may be captured and to the sample composition.[7] Finally, as an extension of our analysis, we also estimate the impact of external debt on the *size* of the public sector.

In view of the features noted above, it would be interesting to see whether our results are