



EconoQuantum
ISSN: 1870-6622
equantum@cucea.udg.mx
Universidad de Guadalajara
México

Bista, Rishav
Foreign aid policy and its growth effect in Nepal
EconoQuantum, vol. 3, núm. 1, 2006, pp. 109-141
Universidad de Guadalajara
Zapopan, Jalisco, México

Available in: <http://www.redalyc.org/articulo.oa?id=125015202005>

- How to cite
- Complete issue
- More information about this article
- Journal's homepage in redalyc.org

redalyc.org

Scientific Information System
Network of Scientific Journals from Latin America, the Caribbean, Spain and Portugal
Non-profit academic project, developed under the open access initiative

Foreign aid policy and its growth effect in Nepal

RISHAV BISTA¹

- **Abstract:** Donors are perplexed, as aid has been unable to reinforce growth in many underdeveloped countries. In this paper, specific attention has been diverted towards various issues pertinent to the aid-growth relationship; in particular, we discuss Nepal due to its uniqueness. A general conclusion is that donors should conduct more research to country-specific problems and attributes, such as the socio-cultural factors before they disburse any kind of aid. In case of Nepal, the country would be better off if the donors assume exclusive control over the project and work directly with the local bodies, NGOs or other consulting companies, rather than the government.
- **Resumen:** Donadores internacionales están confundidos debido a la inhabilidad de sus ayudas de reforzar el crecimiento económico en muchos países subdesarrollados. En este trabajo se analizan diversos temas relacionados con la relación ayuda-crecimiento, tomando como referencia el caso de Nepal debido a sus características particulares. Una conclusión general es que los donadores internacionales deben conducir una mejor y mayor investigación acerca de los problemas y atributos específicos del país receptor, antes de desembolsar cualquier tipo de ayuda. En el caso de Nepal, el país estaría mejor si los donadores asumieran control exclusivo sobre los proyectos y trabajaran directamente con los cuerpos locales como las ONGs o grupos consultivos, más que con el gobierno.
- **Key words:** Foreign aid, government, investment expenditure, Dutch disease effect.
- **JEL code:** C01, E62, F35, H61

¹ Coe College, Cedar Rapids, Iowa, USA. I would like to thank comments made by two anonymous reviewers to an earlier version of this paper. All remaining errors are mine alone.

■ *Introduction*

There are three different traceable effects of aid, as Mosley, Hudson and Horell (1987) state, first being the one traced directly to the project to which aid is disbursed; second the indirect effects of public spending pattern of the recipient country, and third as the whole of the recipient government. Any fiscal adaptations to aid inflows would exert strain on the rest of the macro-economy through the exchange rate, a phenomenon characterized by the Dutch disease and the level of interest rates. This postulation appears to be holistic and relate directly the economic growth to aid. Yet, the foreign aid and its impact on growth has never been so obscure. Many under-developed countries, which have foreign aid as a major source of income for their government, have shown anything but optimistic results on economic development. This has led economists to seriously reconsider the effect and objective of aid to growth in underdeveloped countries. Many have begun to wonder whether aid should even be considered as a tool for fostering growth in underdeveloped countries. Yet we see billions of dollars being disposed to these underdeveloped countries, both by countries and organizations.

The recent trend is heading towards a different direction, as rich countries have reduced their aid contributions from around 0.34% to 0.23% of their output between 1990 and 2002 (World Bank, 2004). Hopkins, Robinson and Tarp (2000) suggest that the changes in economic and political policies of the rich countries might be responsible for the declining aid, or as they coin it, "aid-fatigue." Others speculate that it is due to the growing distrust among the donors towards the recipient government. Since the inception of the "money matters, but only in a good policy environment" concept as postulated by Burnside and Dollar (2000), the World Bank has started to take a rigid stance against corrupt governments. According to Harm and Lutz (2004), under-developed countries are faced with an economic paradox known as the "poverty trap." It is a condition where due to lack of pre-existing infrastructure and sound economic management, a country is unable to efficiently utilize aid. Donors have been blaming the recipient countries government, and their lack of sound management and policy implementation as a possible reason for aid-growth failure in certain countries. But we also have to speculate that aids are given in the first place to countries who lack the basic infrastructures, or socio-economic conditions to promote growth, and the primary culpability could be attributed to their government itself. So questions arise as to whether the donors are blaming a system as their

failure to achieve growth, ironically which system was the root cause of aid allocation to begin with? Even worse is the case when the pursuit of such policies by the government worsens the economic performance of the country. In this case, the country may qualify for still more aid because its situation is deteriorating. It seems like we are going in full circles here, oblivion of the entrance and the point of regression.

The other facets of aid are the question of fungibility of aid and the micro-macro paradox. The aid economists have bifurcated on these issues. Some view the fungibility of aid as a way the recipient country could divert resources to projects that otherwise would have been unutilized, while others say that the same diversion of resources would indulge the government to mismanage expenditures which serves nothing more than to the utility function. As Mosley (1987) speculates that even though the microeconomic impact of aid might be somewhat evident according to the literature based on growth and aid, the macroeconomic aspect of aid and its impact still remains obscure, hence the notion of micro-macro paradox.

In this paper, I have utilized Nepal as a subject to analyze some of these lingering obscurities in the literature of foreign aid. Nepal is unique in its own right and offers several advantages. As postulated by Fisher (1966), Nepal receives aid from an unusually large number of donors, yet the large varieties of aid programs are confined in a relatively small area. Nepal, with its diversity of religions and languages, along with its rough terrain in-between a small area, poses a barrier to national unity. Other irregularities include unbalanced regional development, dependence on foreign aid, excessive government control and regulation along with inefficient public enterprises and administration. On top of that, Nepal is a late starter when it comes to economic involvement and development as it opened to the outside world only in the early fifties. Yet, since then no other countries receive as much diversity of aid from such diverse donors. Nepal has also been plagued with the ongoing civil rife between the government and the Maoists since 1996.

The main objective of this paper is to investigate the role and effectiveness of foreign aid in Nepal. The paper talks about the history of aid and donor-government relationship in Nepal, along with its effect on growth, if it had any. The impact of foreign aid in Nepal is traced via two models. The first model examines the relationship between foreign aid and growth, which is the primary objective of aid, as well as this paper. The second model examines the macro-economic impact of aid, which is traced through its effect on the exchange rate. The second model attempts to investigate whether aid influx in Nepal has contracted

its export base, a key factor of growth, through its effect reflected in exchange rate.

The rest of the paper is framed as follows: the next section considers the literature of foreign aid in general and its involvement in the recipient countries, the third section talks about the role and history of foreign aid in Nepal. Section 4 looks at the statistical models formulated for the aid-growth relationship, along with my 30-year time series analysis of aid-growth relationship in Nepal. Section 5 traces the macro-economic effect of aid in Nepal, characterized by the Dutch disease, through its effect on exchange rate. Final section concludes the paper.

■ *Foreign aid and underdeveloped countries*

Organization for Economic Cooperation and Development (OECD) defines foreign aid as official development assistance, consisting of the grants or loans that one government or multilateral organization gives to a developing country to promote economic development and welfare. This definition of foreign aid has been broadened by various organizations such as IMF and World Bank along with the Congressional Budget Office of the US (1997) (CBO from now on). The broader definition of foreign aid subsumes all money classified as official development assistance, and further incorporates military assistance, political development programs, export promotion, debt forgiveness, and non-concessional lending by all bilateral and multilateral organizations. Foreign aid itself can be distinguished into various categories based on its purpose and effect, intended upon the recipient country. Financial assistance could be disbursed for various reasons including strategic, political, economic or cultural reasons, which in turn is used as a basis to differentiate various types of donors.

There is no complete accord as to which form of assistance is the most optimal. According to CBO (1997), program assistance is generally the most useful and flexible instrument as it is largely a cash transfer which could be turned on and off at will and disbursed quickly or slowly as the recipient proceeds along a program of reform, thereby encouraging the right reforms or discouraging backpedaling or failure to reform. Another noticeable trend in the modern era is the increasing multilateral assistance that is slowly but surely substituting bilateral assistance. Multilateral assistance adherents argue that bilateral aid is generally given for political reasons, in the form of tied aid. This might entail that the recipient be required to spend some or all of its foreign aid

on goods and services produced in the donor's country, hence undermine the objectives of an aid program. Aid may also be given to alleviate the effects of natural disasters or increase the recipient's exports, as well as to promote the economic and social development of the recipient. But these types of aid may have counterproductive effects.

Rich countries reduced their aid contributions from around 0.34% to 0.23% of their output between 1990 and 2002 (World Bank, 2004). Hopkins, Robinson and Tarp (2000) suggest that the changes in economic and political policies of the rich countries might be responsible for the declining aid, or as they coin it, "aid-fatigue." They further speculate that the reasons may include lower pay-offs for special interest groups due to the changing regional focus towards the commercially less interesting countries, tighter budgets in donor countries, and a growing distrust of recipient government.

Factors, such as the quality of a developing country's government and the economic policies it pursues, appear to be considerably the more imperative factor in promoting growth and development. Aid, in promoting growth, has also been shown to be dependent heavily on pre-existing infrastructure and background conditions. This notion introduces a well-known phenomenon that has been a paradox in the literature of aid, known as the "poverty trap". For aid to be effective, proper infrastructure is required. Yet aid with intent of enhancing growth is given to underdeveloped countries that severely lack these qualities. Various literature based on foreign aid have indicated that the dynamics propelling material and social progress are extremely complex historical processes and are influenced by many factors. Papnek (1972), in his study of aid effectiveness in varied recipient countries, was able to find significant relationship between growth with savings and foreign aid in Asia but was unable to establish any in the lower Americas and the Africa's. Papnek (1972) attributes to the political, social, and human factors along with the loss of managerial and technical groups and deterioration in the terms of trade in Latin America and Africa, as a reason for ineffective usage of aid. On the other hand, he attributes success in Asian countries to their pre-existing infrastructures, good economic management and favorable natural resource endowment.

Two of the proponents to include social factors into the aid-growth equation was Burnside and Dollar (2000), who formulated that "money matters, but only in a good policy environment." This view of good policies as a prerequisite for successful aid became the dominant conventional wisdom and became extremely influential in shaping policymakers' views and decisions, notably that of the World Bank.

Hopkins, Robinson and Tarp (2000) suggest that there has been “a growing distrust of recipient governments among the donors.” For example, statistics relating to economic or human welfare may have been manufactured by a developing country to satisfy the various rules of organizations dispensing foreign assistance. Harms and Lutz (2004) suggest that countries that perceive donors to disburse aid according to their financing needs have an incentive to artificially raise this need, for example by lowering their domestic investment efforts. Mankiw (1995) suggests that “studies have shown that countries in which political authority has broken down –perhaps even to the point where civil war erupts– are less likely to achieve economic growth and improvements in human welfare.” Instabilities such as the civil war could result into a widespread destruction of private and public property, hereby also raising the economic risk that potential investors face. Various European Countries decided to terminate or hold back their aid package to Nepal, following the after math of the outbreak of the civil war. Even the normally benevolent World Bank has taken a strong stance against aid to corrupt countries. The World Bank (1987) comments that “government officials may take bribes and kickbacks or even misappropriate funds to their own accounts. In either case, the resource represented by the labor of a government employee is not contributing to the economies productive capacity; even worse, it is creating inefficiency elsewhere in the economy.”

Even though there is no particular specification as to what the most favorable action a government could take is to achieve economic growth utilizing foreign aid, one central theme common to all economists is that investment directly correlates to growth, and any variables that can influence investment would in turn influence growth of that country. Any growth theory would agree that savings provides for investment, hence one needs to strengthen the domestic savings of the country to provide funds for investment. Government utilizes foreign aid to pursue its fiscal policy, which would entail expenditures on recurrent and developmental expenditures. Although there is no complete accord as to which one might be optimum policy, as far as utility of aid goes, economists agree that developmental expenditure would prove more effective. According to a study conducted by Mosley, Hudson and Horrel (1987), they suggest that donors should concentrate their aid on countries where aid effectiveness is high, use criteria for effectiveness such as rate of return on investment, proportion of aid allocated to recurrent budget and impact of aid on private investment. They found that rate of return on capital, along with the share of aid inflows allocated to development

budget were on average higher in 'high aid, high growth' countries than in 'high aid, low growth' countries.

Aschauer (1985) and Komandi (1983) conclude that a temporary increase in government spending on consumption goods would impact private consumption negatively, to the extent that private and public goods are substitutes. They contest that government consumption expenditure wouldn't enhance growth, as the expenditure would simply replace the private consumption expenditure, due to their substitutability nature irrespective of whether the spending is transitory or permanent. They also suggest that public and private capital goods are complementary in nature, hence a rise in government investment may raise the marginal productivity of private capital and in turn, may stimulate higher private investment expenditure. This notion indicates that the public investment expenditure may have significant positive effects on the level of aggregate demand. Aschauer (1990), in his empirical analysis, centered on period 1949-1985, where he relates the GDP to various public sector variables. He concludes that public consumption and military investment are of little statistical significance to gross national product, but net public investment in infrastructure capital has a strong positive effect on the output level. Barro (1990) found that growth and savings rates fall with an increase in utility type expenditure, but rises initially with productive government expenditure due to the productive role that creates a potentially positive linkage between government and growth. Kormendi and Meguire (1985), on the other hand, found no significant relationship between growth and consumption spending and concluded that these public services enter into utility functions rather than into the production function. Grier and Tullock (1987) extended Kormendi and Meguire (1985) analysis and found a significantly negative relation between the growth of real GDP and the growth rate of consumption expenditure.

Based on various reasoning and empirics above, I believe it is safe to say that the public net investment in infrastructure capital such as highways, port facilities have dramatically larger impact than military investment or public consumption expenditure, and hence more proportion of aid should be allocated to development expenditure. Yet governments engage themselves spending aid into recurrent expenditure, which according to Mosley (1987), makes no direct economic contribution, but instead serves a purely political function. So questions like why government of various recipient countries engage themselves in spending aid into consumption expenditure, lingers in the literature of foreign aid. Economists have postulated various theories

to explain the phenomenon. Some claim that the recipient governments utilize aid to serve their own interest, as opposed to the general interest, which leads expenditure in less productive areas (Bauer 1991). The resulting politization of life enhances the hold of governments over their subjects and increases the stakes in the struggle for power.” Many other economists argue that government that has poor taxation base or system in their country tend to channel more of their aid to consumption expenditure, due to their inability to fund resources out of tax efforts.

Another claim economists have put forth is the problem of fungibility of aid, a topic of debate in the recent years. Mosley (1987) said it best, when he introduced the concept of the “micro-macro paradox.” Moseley concludes that it is impossible to establish any significant correlation between aid and growth in developing countries, the reason being the fungibility and the leakage of the aid into unproductive expenditure in the public sector. However, at a micro level, all donor agencies regularly report the success of most of their projects and programs, hence the paradox or contradiction between the two economic levels. Economists find it difficult to reach an agreement in regards to whether fungibility of aid is conducive to economic development. Some proponents of the phenomenon argue that foreign aid can substitute for private capital by providing the funds for investment in public goods that the international capital market wouldn't or would supply at a high interest rate. They also argue that foreign aid can be used as a substitute of funds to enable a policy that wouldn't have been possible before. For instance, CBO (1997) states that, “military aid, an administrative expense, may enable a country to devote a greater percentage of its resources to development programs than if it did not receive military assistance.” But on the other hand, opponents argue that aid intended to promote development may enable some administration to reroute money to other, nonproductive activities. Mosley, Hudson and Horrell (1987) suggest that some developing countries tend to finance recurrent expenditures out of aid, exercising a deliberate and conscious preference for lower levels of taxation than those, which would be feasible in the absence of aid.

This leads one to speculate if we have gone full circle for some period of time, as far as fungibility of aid. Critics argue that the problem arises when the recipient country lacks the technical or administrative ability to absorb or utilize it properly; yet, on the other hand, these are countries that require aid the most even to survive one fiscal year! Furthermore, when the pursuit of such policies worsens the economic performance of an aid recipient, the country may qualify for still more aid because its situation is deteriorating.

■ *Foreign aid in Nepal*

Nepal's economy is characterized by dependence on agriculture accounting for 40% of its GDP with around 37% of its population living below the poverty line, a poor export base but strong reliance on trade. International economic relations were largely in the form of cross-border trade with India and China. Nepal is still characterized as a government with central planning commission, as the central bank, known as the Nepal Rastra Bank (NRB), gained autonomy from the Ministry of Finance only in 2002. Nepal has increasingly adopted market-oriented policies, enhancing the domestic economy and trade, in the late 80s. The primary focus was on privatization of the state industries and creating joint-venture projects, particularly in financial institutions. Nonetheless, these policies have been criticized for benefiting primarily urban areas and rural elites. Morris (1966), after his tour of the nation, suggested that any progress that has been achieved has been confined almost entirely to the so-called valley of Nepal, where the capital is situated.

The role of foreign aid in Nepal, historically, has been to supplement and enhance its meager domestic saving, with an optimism of channeling resources to accumulate development activity and creating a suitable environment for foreign investment. Nepal has been a recipient of foreign assistance since 1952 when it joined the Colombo Plan or Cooperative, Economic, and Social Development in Asia and the Pacific. According to Foreign Aid Policy (2002), Nepal country embarked on the process of planned development with the launching of the First Five Year Developmental Plan, from 1956-61.

Various infrastructure development has resulted from these projects, notably the Nepalese international airport, the hydroelectrical plant and various other factories. Donations from India and the US comprised nearly third of the grants, target at special projects. Other major donors during the 1950s comprised of the neighbor China, the Soviet Union, Britain, Switzerland, Australia, Japan, and New Zealand including some technical assistance from the UN. According to Foreign Policy (2002), the United States also helped to start the Nepal Industrial Development Corporation, which granted loans to several industries, in order to enhance the microeconomy of the country. After the 1960s the structure of aid started to shift more towards loans. The loan share of foreign aid increased from under 4 percent between 1965 and 1970 to more than 25 percent by the 1985-88 period, which were termed, "soft loans," by the World Bank. A soft loan is a loan with a below-market rate of interest, primarily serving as concessional loans to borrowers. The mid

70s also experienced shift in donors, leaning more towards multilateral assistance. Under the patronage of World Bank, the Nepal Aid Group was created in 1976, as suggested by Congress(2005). By 1987, sixteen countries and six international agencies participated in the group. The level of commitment from the Nepal Aid Group had increased from Rs1.5 billion in 1976-77 to Rs5.6 billion in 1987-88. Multilateral assistance programs played a major role in development planning accounting for more than 70 percent of the funding. The major donors comprised of the International Development Association of the World Bank and the Asian Development Bank. The aid structure during the late 1990s comprised of project aid, commodity aid, technical assistance, and program aid. According to the Library of Congress (2005), in the 1980s, bilateral United States economic assistance channelled through the Agency for International Development averaged US\$15 million annually, while OPEC provided US\$30 million in bilateral aid from 1979 to 1989. From 1981 until 1988, Japan was the premier source of bilateral ODA for Nepal, accounting for more than one-third of all funds, followed by West Germany.

The Nepalese government expenditure constitutes recurrent expenditure, capital expenditure and payment of principals. The government expenditure is financed primarily by revenue surplus, foreign grant and deficit financing that includes loans (both internal and external) and changes in cash balances. Foreign loans constitute external loans that finance government expenditure. Approximately 55% of developmental expenditure has been financed through foreign aid in the recent era, accounting for 5 % of the GDP, and about 25-30 % of the total government expenditure (Economic Survey, 2004). The current pattern indicates increasing share of technical assistance, comprising over 40 percent of total aid. Due to the steady rise in the ratio of loans in total aid, the outstanding external debt stock of the government is around 55 percent of GDP as suggested by the Ministry of Finance (2002).

From 1972 to 2004, total expenditures grew from US\$879 million to US\$1.2 billion and were estimated to be US\$1.4 billion in fiscal year (FY) 2005. Fiscal deficits increased from US\$125 million to US\$12 billion but declined to US\$208 million by FY 2004 (Library of Congress 2005). These changes are largely due to substantial increases in government revenues and foreign grants. According to World Bank figures, official development assistance increased from US\$8.2 million in 1960 to US\$369 million in 2003 and then fell to US\$177 million in 2004. Ministry of Finance indicates that total foreign aid committed in fiscal year (FY) 2003 was US\$555 million, with 63.3 percent in grants and 36.7

percent in loans. In FY2004, total foreign aid committed was US\$320 million, of which 37.7 percent was grants and 62.3 percent, loans. In June 2004, active World Bank credits totaled US\$302 million, with the greatest portions allocated to the financial sector (US\$91.5 million) and to energy and mining (US\$75.6 million). The recent picture suggests that more of internal loan is contributing to deficit financing as opposed to foreign loan. Nepal's meager taxation effort, a key source of government revenue, has deprived the government of other alternatives besides the deficit financing of the budget.

Figure 1
Fiscal deficit to GDP (in logs)

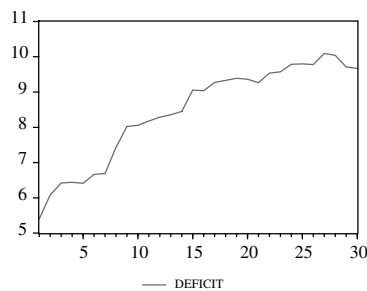


Figure 2
Aid to GDP (in logs)

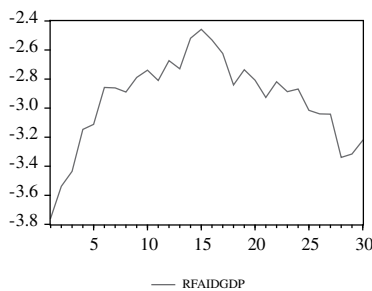


Figure 2 indicates the involvement of foreign aid in the Nepalese economy over time. One major policy, as indicated by the tenth plan, is to seek more aid in grants and then switch to highly concessional loans such that aid doesn't constitute a burden for the future generation. The graph suggests that the government hasn't been successful in managing an efficient fiscal policy, since the deficit is in an increasing trend.

Significant changes in donor's investment structure have ensued, succeeding the launch of the Maoists' People's War in 1996, due to territorial shift in power and control. Expenditure soon shifted towards security sector, at the expense of development expenditure creating tremendous pressure to the internal revenue sector, hence increasing the dependency on foreign aid even more (Informal Sector Service, 2005).

The government has re-classified budget categories from regular and development expenditures to current expenditures for administration and security matters, capital expenditures on programs and projects for production and output, and loan repayment expenditures (Congress, 2005). Defense expenditures grew from US\$51.5 million to an estimated

US\$109.9 million from 2001 to 2005. The Ministry of Defense has been budgeted approximately US\$149.8 million for 2006.

As a country with limited institutional and absorptive capacity, some argue that the poor functioning institutions, under-paid civil servants, and misuse of resources makes Nepal vulnerable to aid mismanagement. Foreign Aid Policy (2002) suggests that as technical assistance is in an increasing trend, but has not shown to be complementary with capital assistance to make optimal use of technical manpower available in the country. Serious lack of human capital and technical expertise within the country has resulted on excessive reliance on foreign expertise, hence is having a reverse effect. Critics argue that, in case of Nepal, the loan component of foreign aid has increased over time and part of it at least is wasted in unproductive expenditure, increasing the burden on the national exchequer and hence depriving the poor from their share of welfare allocation program.

■ *Empirical analysis
of aid-growth relationship*

Even though foreign aid existed for a long while, the literature and empirical analysis based on aid and growth is at most inadequate. One important theme, common to all aid economists, is that investment is a fundamental part of the growth process. The origin of empirical analysis between aid and growth could be traced back, as far as the Harrod-Domar growth model. The Harrod-Domar model developed in the 1930s suggests savings provide the funds, which are borrowed for investment purposes. The economy's rate of growth depends on the level of saving and the savings ratio also known as the productivity of investment or the economy's capital-output ratio. Considerable interest in the econometric and statistical aspect of foreign aid was generated after the analysis conducted by Hollis Chenery and Strout (1966) when they developed the "two-gap" model of aid-growth relationship. Chenery and Strout (1966) analyzed data for 50 developing nations, in which they measured the growth rate of GNP, investment, domestic saving, and the proclivity to export/import, based on the assumption that foreign aid would be productive, provided investments and savings acted as a constraint on growth. Based on these parameters, they segregated countries based on the likelihood to benefit from the connection of external resources, as the recipient country's own saving is inadequate, and also on countries that might have limited utility of foreign injection of resources. The basic two-gap model has two components. According to Harms and

Lutz (2004) the model links investment and growth, which determine the supply side. In the Harrod-Domar tradition, the two-gap models assume a linear relationship between output (Y) and capital (K),

$$(1) \quad Y = K / v$$

Here v denotes the capital-output ratio. This could be re-written as a function of investment rate (I) as,

$$(2) \quad \frac{\dot{Y}}{Y} = \frac{\dot{K}}{vY} = \frac{I}{vY} - \delta$$

Where \dot{Y} denotes the change over time or the change in output between two periods and δ represents the depreciation rate. Note that current output is predetermined by past investments. As a planning framework, according to Harms and Lutz (2004), equation (2) allows policy makers to determine the minimum level of investment (I^*) required to achieve the desired rate of output growth (g^*). According to Chenry and Strout (1966), the model suggests that in order to achieve a favorable growth rate, the country must comprise of adequate savings for investment and sufficient foreign exchange to buy the capital goods necessary for development from the international market:

$$(3) \quad \frac{\dot{I}}{Y} = v(g^* + \delta)$$

Equation (3) deals with the determination of investment. The basic national income account suggests that

$$(4) \quad S_p - I = (G - T) + (X - M)$$

Here S_p = private savings, G = government (current and capital) expenditure, T = taxes, X = exports and M = imports. This can be rewritten as

$$(5) \quad I = S_p + (T - G) + (M - X) = S + F$$

Where S is domestic savings and F is foreign savings, in equation (5), as suggested by Harms and Lutz (2004), private savings and the budget surplus have been aggregated into domestic and foreign savings since

the trade deficit has to equal the sum of net current transfers (including foreign aid), net capital inflows (capital account plus financial account) and net factor payments. The two-gap suggests that all the terms on the right-hand side of (5) are determined exogenously. The optimal levels of investment, as suggested by Chenery and Strout (1966) holding productivity constant could be determined by the amount of aid needed to achieve that growth by subtracting the domestic saving rate from the growth rate or subtracting export earnings from import requirements. Whichever entails the larger difference would be the amount of foreign aid the country needs in order to achieve the desired growth rate. This is illustrated by:

$$(6) \quad I_g^s \leq S + F$$

If the resulting investment level happens to be below the desired level I^* , the economy would be facing a savings gap. According to Chenery and Strout (1966), deficiency in either area could be compensated by foreign aid, filling the gap either by providing foreign saving to supplement inadequate domestic saving or by providing the necessary foreign exchange that the country requires for development but unable to produce autonomously. Foreign gap is derived from the assumption that imports consist of capital imports (M_K) and other imports (M_O). Hence:

$$(7) \quad M = M_O + M_K$$

A fixed share m is the sum of all capital goods that need to be imported.

$$(8) \quad I = 1/m(M_K) = 1/m(M - M_O)$$

Substituting $M = X + F$ into this equation gives

$$(9) \quad I = 1/m[(X - M_O) + F]$$

The investment constraint due to this foreign-exchange restriction is given by

$$(10) \quad dY = \beta_1 + \beta_2 A + \beta_3 S + \beta_4 I$$

There is a 'foreign exchange gap' (or 'trade gap') if this investment level is below I^* , i.e. below the level required to achieve the desired

level of output growth g^s . Depending on the various exogenous and predetermined variables, either the savings constraint (6) or the foreign-exchange constraint (10) can be binding for a country.

Various economists have since adopted similar methods of statistical analysis, notably Papnek (1972) followed by Mosley, Harrel and Hudson (1987). All of these economists have tried to base the efficacy of foreign aid, based on the relationship between foreign aid, savings, capital formation and economic growth. Papnek (1972) conducts empirical analysis based on the notion that investment leads to growth; hence he speculates that in order to find this relationship one needs to divide investment into three components according to the source of finance, such as savings, foreign aid, government involvement and much more. Even though he limited himself into the noted variables, he nonetheless admits that a complete model would need more variables. Papnek makes the following specification to estimate his model:

$$(11) \quad dY = \beta_1 + \beta_2 A + \beta_3 S + \beta_4 I$$

where Y is national income, A is aid inflows, S is domestic saving, I is inflows of private capital from overseas, where each of the variables are measured as a proportion of national income in the recipient country over the period of time.

Even though certain difference existed between Papnek and Stout, such as Papnek used savings as one of the independent variables, both of their models could be attributed to the two-gap model, which was ultimately derived from the Harrod-Domar growth model. Papnek (1972) conducted a cross country analysis applied to thirty-four countries for the 1950s and fifty-one countries for the 1960s, where savings and inflows explained over a third of growth. Papnek also came to the conclusion that aid can fill the foreign exchange gap as well as the savings gap. Papnek's aid-growth model was further analyzed by Mosley, Harrel and Hudson in (1987). They too utilized the simple Harrod-Domar model, with an assumption that aid does augment investment. In the model, investment was divided into aid, commercial inflows, domestic saving, whereby a new variable, growth of export values was added. Their specification can be represented by the following equation:

$$(12) \quad dY = \beta_1 + \beta_2 A + \beta_3 S + \beta_4 I + \beta_5 dX + \beta_6 dL$$

where dX represents percentage annual rate of growth of export values, while dL is the percentage annual rate of growth literacy.

Their results however were not as rosy as their predecessors. Mosley, Harrel and Hudson (1987) conducted an empirical test comprising of a cross sectional data of 81 different countries indicating that the rate of return on capital is higher and the share of aid inflows allocated to the development budget are on average higher in high aid, high growth countries. They were among the pioneers who introduced the concept of, “fungibility of aid,” which the two-gap model might have overlooked. They scrutinize that if aid was received, for example to build a dam then the money initially utilized for dam could be switched to any other purpose, such as other capital projects, productive forms of recurrent expenditure, which would augment income in the future; also, on the other hand, on non productive or wasteful recurrent such as the army or paying off debts, which would depress the efficacy of aid- growth relationship.

Since the inception of the “two-gap model” there has been mixed results about the relationship between aid and economic growth. Papnek (1972) states that, “the negative results of studies of foreign aid can be attributed to statistical biases. The fact that aid is targeted toward the poorer nations might bias downward the measured correlation between saving or growth rates and the amount of aid received.”

Mankiw (1995) based his study on a group of developing countries in Asia; he stated that data on economic performance over recent offer too few observations to allow scholars to discriminate among the many factors said to contribute to growth.”

Recently economists have delved into the empirical analyses of effect on foreign aid on growth, implementing a two-step approach, based on relationships between aid and investment, and that between investment and growth, roots of which could be traced to the two-gap model. This two-step approach was later modified into a single equation, using a joint test approach (Harms and Lutz, 2004).

$$(13) \quad \frac{I_t}{Y_t} = a_0 + a_1 \frac{F_t}{Y_t} + u_t$$

where Y is growth and F is the foreign aid.

Even though this might provide a direct test of the effect of aid on growth, it has certain disadvantages, according to Harms and Lutz (2004) in that if there is no significant aid effect, we do not know which (or both) of the two relationships is not supported by the data. Hansen and Tarp (2000) summarized the results of 29 papers, published between

1968 and 1998, and were able to find a positive relationship between investment and foreign aid. Boone (1996) examined the effect of aid on a variety of macroeconomic variables and development indicators, and found little or no significance between aid and investment. According to Harms and Lutz (2004), Boone's study has been widely cited as final proof that there is no significant, positive influence of aid inflows on investment and growth in recipient countries. Easterly (1999), on the other hand examined the still widespread use of the 'gap model' in international policy circles and re-examined the evidence on the basic two-gap relationships for a large sample of developing countries, and generated similar results as Boone (1996).

Burnside and Dollar (2000) were the first ones to implement political economy proxies in the aid-growth model, and came to the conclusion that "impact of aid is greater in a good policy environment than in a poor policy environment." This postulation created a revolution in the political world and somewhat reshaped the policy of donors all around the world. Harms and Lutz (2004) suggested that Burnside and Dollar (2000) seemed to have found the missing link between the micro-success and the macro-failure of aid with their finding that "making aid more systematically conditional on the quality of policies would likely increase its impact on developing country growth." Burnside and Dollar (2000) further suggest that foreign aid to a reforming government may improve the environment for private investment by creating confidence in the reform program and by helping ease infrastructure bottlenecks.

However, these conclusions were not devoid of speculation. Hansen and Tarp (2001) argues that this political economy approach could be flawed. Hansen and Tarp (2001) attribute the Solow as well as Dutch disease phenomena as possible reasons for a non-linear effect on aid-growth relationship and indicated that the policy-interaction term could no longer be significant, arguing that their result might have just captured the diminishing returns to aid or deep structural differences rather than implementation of good policies.

I have adopted Mosley, Harrel and Hudson (1987) specification in order to assess the relationship of growth between foreign aid and growth in Nepal. In this time series, model I have real GDP as my dependent variable used as a proxy for the determination of growth in Nepal. Real GDP is achieved by deflating the nominal GDP by CPI of the corresponding year, with 1995 as the base year.

Economists have predicted that due to the complimentary nature of public and private capital goods, a rise in government investment would raise the marginal productivity of private capital and in turn stimulate

higher private investment expenditure. Based on this assumption, I expect government investment expenditure to have a positive relationship with growth, represented by change in real GDP.

I expect the consumption expenditure to have insignificant relationship with growth, as economists argue, that these expenditures translate into utility function rather than growth. The development government consumption expenditure (CDE) is obtained as the difference between government consumption and defense expenditure. As far as efficacy of aid to growth goes, I really have no definite expectations, as to what might be the relationship between them. Aid to Nepal has been more like a necessity than a tool for economic growth, as much of the budget comprises of foreign inflows. Following what Papnek (1973) feels is of conventional wisdom, I have divided investment into its various major sources of finance such as domestic savings, foreign resource inflow and the export volume. I expect positive relationship between domestic savings and rate of growth rate. I have adopted the model originally postulated by Papnek, which was modified by Mosley, Hudson and Horell (1987). Since Nepal does a lot of deficit financing, both internally and externally, I was curious to see the effect it has over growth, in the thirty-year period. Thus the model I intend to test could be illustrated with the following specification:

$$(14) \quad \log RGDP_t = \beta_1 + \beta_2 \log(I - E_t) + \beta_3 \log(DBT_t) + \beta_4 \log(SAV_t) \\ + \beta_5 \log(FA_t) + \beta_6 \log(EXP_t) + \beta_7 \log(CDE_t) + u_t$$

Data for Nominal GDP is obtained from the Economic Survey of Nepal.² The CPI index is acquired from the Quarterly Economic Bulletin of Nepal Central Bank

Data on government expenditures such as consumption and investment expenditure, foreign aid, gross domestic saving and debt is retrieved from the Economic Survey of Nepal. Data on export value is taken from the Quarterly Economic bulletin of Nepal. All these variables are transformed from nominal to real variables by deflating each variable by the CPI index of each year with 1995 as a base year. The CPI is obtained from the Quarterly Economic bulletin of Nepal.³

After converting my variables into their log forms I inspected my variables to determine their stationarity. I ran the Augmented Dickey-

² Economic Survey of Nepal, Fiscal Year 1994, 2003 and 2004. His Majesty's Government Ministry of Finance.

³ Quarterly Economic Bulletin, Nepal Rastra Bank, Volume 39, Number 4, Mid-July 2005

Table 1
Variables and expected signs

Variable	Definition	Expected Sign
RGDP	Real Gross Domestic Product	
I-E	Ratio of government Investment Expenditure to GDP	(+)
FA	Ratio of Foreign Aid to GDP	(?)
DBT	Ratio of total outstanding Debt to GDP	(+)
SAV	Ratio of gross Domestic Saving to GDP	(+)
CDE	Ratio of (CE-government defense expenditure) to GDP	(+)
EXP	Ratio of growth rate of export Volume to GDP	(+)

Note: A positive sign (+) indicates that an increment in the designated variable is expected to give a rise to growth, or the dependent variable, vice versa for negative(-) sign. (?) implies that the sign depends on the composition of expenditure.

Fuller test for my initial data, and the test showed that the variables had unit roots indicating that the variables are non-stationary. Non-stationary series do not revert back to their mean, which makes it inefficient in extracting any sort of relationship of the variable over time. These types of series are I(1) process which implies that the variable needs to be differentiated once to achieve stationarity. The most important consequence is the spurious regression problem, which shows false relationship between two unrelated variables. I have utilized five different equations in my model, and the inspection of the residuals of each model indicates that the residuals are stationary; in other words, they are residuals I(0) process. Even though the variables independently have stochastic trends, their linear combination cancels out the stochastic trends. The unit root test on the residual utilizing the Augmented-Dickey Fuller test confirms that the variables are co-integrated,⁴ which implies that they have similar stochastic trends, since their residual is stationary, never diverge too far from each other.

I have implied different partial regressions among the variables as suggested by Papnek. On top of that I wanted to avoid the problem faced by the model in equation (13). As Harms and Lutz (2004) commented on the joint test approach, that if there is no significant aid effect, we do not know which (or both) of the two relationships is not supported by the data. Hence I believe that the partial regressions would enlighten us better as far as relationship between the variables are concerned.

⁴ The results of the unit root test on the residuals of each equation from the Augmented Dickey Fuller test are available in the Data Appendix.

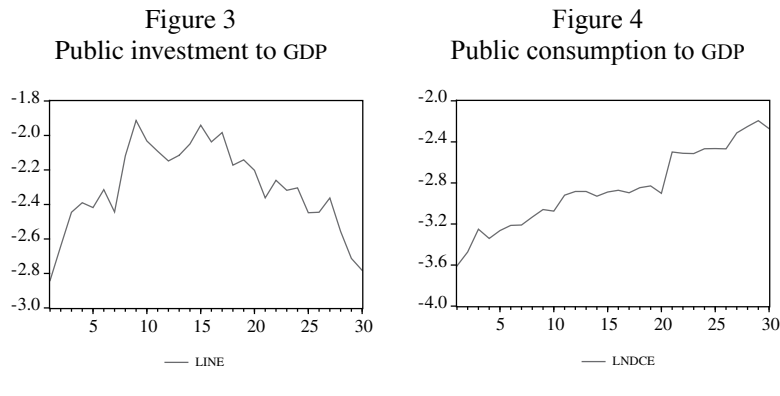
Table 2
Empirical Results

Equation	1	2	3	4	5
constant	-13.32 (-3.15)	12.73 (28.58)	11.88 (19.88)	13.16 (33.79)	12.34 (19.05)
Log (FA)	0.08 (0.80)	0.04 (0.45)	-0.009 (-0.07)		0.08 (0.41)
Log(SAV)	0.30 (6.05)*	0.27 (5.27)*		0.389 (29.15)*	
Log(I-E)	-0.155 (-1.26)	-0.17 (-1.45)	-0.27 (-1.66)***		
Log(DBT)	0.01 (0.35)				
Log(CDE)	0.17 (1.68)***	0.17 (1.84)***	0.55 (6.36)*		
Log(EXP)	-0.00 (-0.85)	-0.03 (-1.37)	-0.002 (-4.37)*		
Adjusted R ²	0.97	0.97	0.947	0.966	0.02
F-Value	136.08	190.95	111.78	149.9	0.16
DW	1.07	1.03	1.53	0.90	0.02

Notes: t- value in parenthesis. Observations = 30 years (1974-2003), (*) Significant at 1% level, (**) Significant at 5% level, (***) Significant at 10% level

Equation 1 could be described as the joint test, where all the independent variables are regressed against real GDP, a proxy for economic growth. Gross domestic savings, as expected, is positively associated with RGDP, with an estimated coefficient of 0.30, significant at 1% level. Net government consumption expenditure is also positively associated with RGDP, indicating that government development consumption expenditure has enhanced growth over the years. The effect of aid is insignificant in this equation, so is the effect of government investment expenditure. Equation 3 examines the effect of foreign aid along with government expenditure and other variables. Note that the gross domestic savings rate is omitted in this equation to account for the separate effect of aid on growth. There is a slight negative relationship between government investment and RGDP, contrary to the results from public finance literature. Government consumption development expenditure has a significant positive relationship with a coefficient of 0.55, significant at 1% level.

Equation 4 examines the individual effect of savings against RGDP. There is a significant positive relationship between the two variables, as indicated by the equation. Equation 5 examines the individual effect of aid against growth, and it appears there is no significant relationship that exists between the two variables. There is no significant relationship of export value to growth in any of the first three equations. This is consistent with empirical analysis by Papnek(1973), where he mentions that in addition to savings and foreign inflows variety of other variables are expected to effect the rate of growth, but finds no evidence that they do. Papnek (1973) fails to find the relationship between export volume and growth, whether measured on a per capita basis or measured as percentage of GDP, and assumes that the effect might have been picked up by savings. The composition of government expenditure has significantly changed over the years in favor of developmental consumption expenditure over investment expenditures indicated by the figures below. The shift of resources from developmental budget to unprecedented defense budget at the cost of developmental expenditures is due to the eminence of insurgent groups called Maoists in the country. This biased composition of government expenditure towards consumption could account for the significant relationship associated with growth.



Finally, I was unable to establish any significant relationship between aid and RGDP, in any of the above equations. This result is consistent with the findings of Mosley, Hudson and Horrel (1987), who were unable to establish any statistically significant correlation between aid and growth for a cross-sectional sample of 81 developing countries.

■ *The dutch disease effect*

Contemplating another facet of aid besides its direct effect on growth, the export sector, we might be able to shed some light on aid's other macro-economic effects. According to Chenery and Stout (1966), change in rate of exports has a greater impact on savings in a smaller, more trade-dependent economy. This characterization of economy is analogous to Nepal, a small open economy that has theoretically an unlimited world market for its products, but with severe infrastructural bottlenecks. According to Papnek (1970), export often produces highly concentrated incomes, especially in case of primary exports, and further suggests that they are politically and administratively easier to tax than more diffused wage or profit income, and facilitate higher rate of government savings. Countries with higher rates of exports tend to face less of a foreign exchange constraint on investment and therefore tend to provide more of incentive to savings. According to Mosley, Hudson and Horell (1987), any fiscal adaptation to aid inflows will exert an influence on the rest of the macro-economy through the exchange rate and the level of interest rates. It is the exchange rate that determines the feasibility of trade between two countries.

According to Mosley, Hudson and Horell (1987), the transfer of aid money raises the price of some goods, depresses the price of some others, and hence has side effects on the private sector of the recipient economy through the price system. Aid flows tend to reduce the price of goods and services which are supplied by the project, which is often offset by driving up the prices of those goods and services for which demand is augmented by the project. In general, the former are tradable (tractors, telecommunications equipment) and the latter are the non-tradables (cement, unskilled labors). According to Ouattara and Strobl (2004), they define the Real Exchange Rate (RER), as the relative price of tradable goods to that of non-tradable goods. A rise in price of non-tradable goods implies that the RER ratio declines, and according to their specification the RER appreciates. Corden and Neary (1982) suggest that a fall in RER implies real exchange rate appreciation and an increase in opportunity cost for producing tradable goods. This implies a deterioration of the country's competitiveness under the assumption of unchanged relative prices in the economies of the trading partners, hence leading to the contraction of export sector, which in turn would contract savings and private investment. This whole progression is characterized by economists as "the Dutch disease" phenomenon.

The disease implies that appreciation of RER shifts the resources into the production of non-tradable goods and services, hence contracting the private sector. At the same time, because of the aid-induced rise in in-

come, total demand increases, for imports and for domestic non-tradable goods and services, including public services. “Unless there is substantial excess capacity to respond from the supply side, this shift in demand will cause the prices of domestic goods and services to rise relative to the prices of exports, which are determined in world markets (DFID, 2002).” Bourdet and Falck (2003), on the condition of Cape Verde, a country similar to Nepal, where external assistance of the country has oscillated between 30 to 60 percent of GDP during the last three decades, shows that remittance has led to the Dutch disease effect in that country.

Nkusu (2004) talks about the responsiveness of aggregate supply to a surge in domestic demand for goods and services as many countries have idle, underutilized productive capacities that could readily be mobilized to respond to this increased demand. White and Wignaraja (1992) found aid inflows caused the Dutch disease effect in context of Sri Lanka. With a panel study of 62 developing countries, Elbadawi (1999) found that aid inflows caused the real exchange rate to appreciate, a result mirrored in the study of Sri Lanka by White and Wignaraja (1992). In contrast, Ogun (1995) for Nigeria, Nyoni (1998) for Tanzania found no evidence of Dutch disease.

The main purpose of this section is to figure out whether foreign inflow, which constitutes remittance and aid, has been causing the contraction of the export sector in the Nepalese economy. Nepal receives a considerable amount of foreign aid, be it project or program aid. It would be only rational to assume that the disease might exist in the economy, especially due to a fragile economic condition and infrastructural bottlenecks which makes it incompetent in responding to the increased demand of non-tradables. Due to the fragile economic structure of the country, its open border with India, dependence on imports for necessary goods, the price index of Nepal is highly affected by supply related factors (Economic Survey, 2004/5).

Nepal’s source of Foreign exchange reserves are foreign aid, remittance, tourism and exports. Currently, Nepal is adopting a dual exchange rate arrangement, which is pegged with the Indian currency (IC), whereas it floats with other convertible currencies. This system of exchange rate was introduced since February 12, 1993 (Thapa, 1996). Most of Nepal’s trade with countries other than India is carried through the US dollar. Hence, other than the Indian Currency (IC), the RER indices are constructed in relation to the US dollar.

Econometric Analysis of the impact of foreign income into Nepal for RER could be represented by the following specification suggested by Edwards (1989):

$$(15) \log RER_t = \beta_1 + \beta_2 \log(I - E_t) + \beta_3 \log(C - E_t) + \beta_4 \log(OPEN)_t \\ + \beta_5 \log(RMIT_t) + \beta_6 \log(FA_t) + \beta_7 \log(INTER_t) + u_t$$

In this model, the real exchange rate is the dependent variable, which is calculated by multiplying the nominal exchange rate of Nepal by the ratio of the consumer price index (CPI) of the US over CPI of Nepal, with 1995 as the base year. The Quarterly CPI of US is acquired from the Federal Reserve Bank of St. Louis, which is later annualized, with the base period of 1984-86.⁵ The CPI and the nominal exchange rate of Nepal are acquired from the Quarterly Economic Bulletin of Nepal central bank.⁶

The relationship between remittance, foreign aid and Inter (combined effect of foreign inflow) and the dependent variable, RER is to be determined after the regression. OPEN, the ratio of (export+import) expenditures to GDP should have a positive relationship with the RER. Increases in exports would increase the ratio and hence OPEN. This automatically implies a depreciation of RER; hence it is expected a positive relationship between OPEN and RER.

Table 3
Definition of variables

Variables	Definition	Expected Sign
RER	Real Exchange Rate	
I-E	Ratio of Government Investment Expenditure to real GDP	(?)
C-E	Government Consumption Expenditure to real GDP	(?)
FA	Ratio of foreign aid to real GDP	(?)
RMIT	Ratio of remittance to real GDP	(-)
OPEN	Ratio of (export + import) to GDP	(+)
INTER	Ratio of aid and remittance to GDP	(-)

Note: the symbol (?) implies that the sign depends on the composition of the expenditure. For example: government expenditure of non-tradable tends to appreciate the exchange rate and vice versa for tradable goods

This is a time-series model from 1974-2003, Government expenditure such as Investment and Consumption, along with foreign aid are taken

⁵ Federal Reserve Bank of St. Louis, St. Louis Fed: Economic Data - FRED®, Monthly CPI for all Urban Consumers available at <<http://research.stlouisfed.org/fred2/search/CPI/1>>

⁶ Quarterly Economic Bulletin, Nepal Rastra Bank, Volume 39, Number 4, Mid-July 2005.

from the Economic Survey of Nepal.⁷ Data on remittance, imports and exports are taken from the Quarterly Economic bulletin of Nepal.⁸ All variables are deflated by CPI (1995).

The table below shows the results of estimation with four different equations taken into consideration. Equation 1 is a regression of all the independent variables with the RER. The result indicates that remittance has significant negative impact on the RER, conforming to the theory of the Dutch disease. The effect of foreign aid is insignificant in this equation.

Table 4
Empirical Results

Equation	1	2	3	4
Constant	-3.33 (-3.15)	-2.84 (-2.59)	-2.20 (-2.95)	-3.33 (-3.54)
Log(FA)	-0.114 (-1.47)	-0.19 (-1.92)***		
Log(RMIT)	-0.144 (-2.07)**		-0.17 (-2.45)**	
Log(I-E)	0.229 (1.61)	0.366 (2.73)*	0.06 (0.69)	0.23 (2.97)*
Log(C-E)	0.51 (4.09)*	0.33 (3.42)*	0.62 (6.04)*	0.51 (6.75)*
Log(INTER)				-0.144 (-2.97)*
Log(OPEN)	0.04 (0.85)	0.03 (0.52)	0.06 (1.09)	0.04 (0.88)
Adjusted R ²	0.95	0.954	0.950	0.954
F-Value	118.48	129.95	140.9	154.28
DW	1.52	1.31	1.46	1.52

Notes: Notes: t- value in parenthesis

N=30 years (1974-2003), (*) Significant at 1% level, (**) 5% level, (***) 10%

The ratio of export and import to GDP has no significant relationship in all the above equations. Equation 2 examines the individual effect of foreign aid as source of foreign income with the RER.

⁷ Economic Survey of Nepal, Fiscal Year 1994, 2003 and 2004. His Majesty's Government Ministry of Finance.

⁸ Quarterly Economic Bulletin, Nepal Rastra Bank, Volumes 39, Number 4, Mid-July 2005.

The results indicate that foreign aid is negatively associated with the RER with an estimated coefficient of -0.19, significant at the 10% level. This confirms with the literature of the Dutch disease effect, and shows that influx of foreign aid has caused a contraction in the export sector of Nepal. Equation 3 examines the individual effect of the flow of remittance as a source of foreign income into Nepal. The results indicate that remittance has negative relationship with the RER with an estimated coefficient of -0.17 significant at the 5% level. Equation 4 examines the combined effect of foreign aid and remittance as a source of foreign income into Nepal, represented by INTER. The combined effect has a negative relationship with the RER with the coefficient of -0.144 significant at the 1% level. This result implies that any source of foreign income into Nepal that leads to an increase in the disposable income is predominantly spent on non-tradable goods. This leads to an increase in demand for the non-tradable good which in turn leads to increase in the price of the good and hence the appreciation of the RER. This appreciation contracts the export sector of the economy, hence impeding growth.

■ *Conclusions*

Based on the results indicated by the statistical analysis, conducted on the relationship between growth and foreign aid in Nepal, I would say the results are dismal, yet highly reflective of the Nepalese governments policy and economic implementation. The only two variables that explained growth was savings and consumption expenditure. Investment expenditure, on the other hand, had no complicity in enhancing growth. The recent composition of governmental expenditure, which is drastically biased towards consumption expenditure, might have resulted in the significant association with growth. Public-sector funds traditionally have suffered from a narrow tax base and numerous tax exemptions, have forced the government to devote its other resources to recurrent expenditures, coupled with the recent surge in defense expenditure. Even though consumption expenditure contributes to growth (as it is inherently a component of GDP), we had established that it is the investment expenditure which drives growth, by complementing with private investment expenditure. I believe Nepal has entangled itself into what economists refer to as “the poverty trap.” Conditions for aid to be effective are pre-existing infrastructures, good economic management and favorable natural resource endowment, all of which Nepal severely lacks. This implies that the aid would prove ineffective, and on top of that create a burden of debt for the country. As Harm and Lutz (2004) put it

together, that countries which start out with a low per-capita income find themselves in a vicious circle with poverty and low-growth reinforcing each other. The condition of Nepal could be described with paradoxes, as small as a country it is, has such diversity of religion and language, along with its rough terrain and corrupt government acts as a barrier to national unity along with national efforts to advance growth. Nothing deserves more blame than the role current government and policies.

Apart from the country's inherent problem, the donors are also slowly losing their confidence. Already many European Union countries have pulled off some of their aid projects. Project implementation capacity of the Nepalese economy is less than satisfactory due to lack of sound information system and an absence of regular supervision. As a consequence of which most projects suffer from time and cost overruns. I strongly believe that donors should reduce their aid levels and promulgate their own aid programs, or work directly with local bodies, NGOs, or other consulting companies. But having said this, I also believe that growth problem could also be country specific. Due to such diversity of culture and socio-economic factors in Nepal, much research should be conducted before the donor even thinks about implementation of such a project. A healthy dialogue between the local community and the donors, along with specific attention to their local needs, might smoothen the policy implementation as well as the increment in local involvement.

As Burnside and Dollar (2000) mentioned that "making aid more systematically conditional on the quality of policies would likely increase its impact on developing country's growth," I also purport that harsher conditionality is to be imposed on the Nepalese government before any aid is disbursed. If the government were used to influx of aid, irrespective of their economic performance, the resources would get wasted directly by corrupt government officials and be utilized to increase patronage and power in relation to the society as Bauer (1991) claims. It is often argued that aid has promoted institutional corruption and organizational cronyism in the society accentuating economic disparities, which just might be the case in Nepal.

Morris (1966) suggests that the chief reasons for inefficient use of aid in Nepal are the inefficiency due to inexperience and nepotism, along with the system under which donors are provided deficient executive control, a deduction which he bases after seeing little or insignificant changes in the living condition in the hills. Most of development, if any, has been concentrated in the capital, creating a huge disparity in economic development between the capital and rest of the country as indicated by Fisher (1966). The Nepalese government, in the light

of these allegations, has argued that many projects and programs are excessively driven by donor demands, thereby reducing the setting of national priorities, along with the requirements of the local people and the country. They also argue that the donors have failed to evaluate the proper needs of the country, and hence have failed to appreciate the peasant nature of the economy.

The macro-level impact of aid reflected through the exchange rate, as characterized by the Dutch disease, was found to have significant effect in the Nepalese economy. The results are consistent with the findings of Elbadawi (1999) and White and Wignarara (1992), in the context of Sri-Lanka, who find that aid inflows caused the real exchange rate to appreciate. According to the analysis, any form of foreign income has contributed to the disease. Economists have argued that the disease should be a short run phenomenon, but in the case of Nepal, it seems to have a long run effect especially due to the country's inability to respond from the supply side. Even though Nepal might have idle, underutilized productive capacities, which could have been utilized to respond from the supply side to mitigate the disease effect, the country is unable to do so due to serious lack of technical and management capabilities. Nepal, so it seems, is in another trap; on one hand, it requires aid and other projects under the direction of the donors in the remote and local areas to enhance growth. On the other hand, it runs the risk of, as Mosley, Hudson and Horell (1987) said, "large projects in remote areas should be avoided, which are likely to drive up dramatically the price of non-tradables in the local economy, possibly to a degree which will negate the beneficial influence of the reduction in the price of the tradable inputs provided by the aid project." Nepal is losing its competitiveness even in the traditional agro-based products. The government should focus on measures like temporary tax reduction on profit for export-oriented industries along with exemption from custom duties on intermediate products. A greater share of aid is to be disbursed, in official aid to agricultural credit agencies and development banks, which then on lend to the private sector.

So the paper suggests that aid has not only been insignificant to growth in Nepal, it has actually generated negative impact on the country's economy. Aid has enhanced improper governmental policies and practices, has been increasing the ever-evident burden of debt, and has generated negative impact to the export sector. Either the donors have chimerical expectations from Nepal, or the Nepalese government simply lacks the ability to manage any forms of resources properly. The government is backing on its implementation of the 10th plan to

relieve the country from all its miseries and adversity. Are they going to realize a better objective with the plan is yet to be seen, as it strives to focus on more holistic manner on poverty reduction and emphasisization of sectoral goals and target inputs? Nepal might very well may have reached a situation where as Mihaly (1965) mentions, a state where the effective use of aid might inevitably require the utilization of methods that will strain the relationship between the donors and the recipient government.

■ *References*

- Adhikari, J. (2003). "Aid in Developing Nepal." *HIMAL South Asian magazine*. (July)
<http://www.himalmag.com/2003/july/review.htm>>
- Ahmed, S. (1986). "Temporary And Permanent Government Spending in an Open Economy," *Journal of Monetary Economics*, 17, (March), 197-224.
- Aschauer, David A. (1990). "Is Government Spending Stimulative?." *Contemporary Policy Issues*. Vol. VIII, No. 4, (October): 30-46.
- (1985). "Fiscal Policy and Aggregate Demand." *American Economic Review*, 75, (March), 117-127.
- Barro, Robert J. (1990). "Government Spending in a Simple Model of Endogenous Growth." *Journal of Political Economy*. 98 (October): 103-125.
- Bauer, P. (1991). "The Development Frontier." *Essays in Applied Economics*. London (Harvester Wheatsheaf).
- Boone, P. (1996). "Politics and the effectiveness of foreign aid." *European Economic Review* 40, 289-329.
- Bourdet, Y and Falck, H. (2003). "Emigrants` Remittances and Dutch Disease." Lund University Department of Economics Working Paper.
- Burnside, C. and D. Dollar (2000). "Aid, policies, and growth." *American Economic Review* 90, 847-868.
- Chenery, H. and A. Strout (1966). "Foreign assistance and economic development." *American Economic Review* 56, 679-733.
- CIA World Fact Book: Nepal. January 2006. Economic Overview.
<http://www.cia.gov/cia/publications/factbook/geos/np.html>
- Congressional Budget Office (1997). "The Role Of Foreign Aid In Development." (May)
<http://www.cbo.gov/ftpdocs/0xx/doc8/foraid.pdf>
- Department for International Development (2002). "The Macroeconomic effects of Aid." Policy paper. (December).

- Easterly, W. (1999). "The ghost of financing gap: testing the growth model used in the international financial institutions." *Journal of Development Economics* 60, 423-438.
- Edwards, S. (1989). *Real Exchange Rates, Devaluation and Adjustment: Exchange Rate Policy in Developing Countries*. Cambridge MA, MIT Press.
- Elbadawi, I. A. (1999). "External Aid: Help or Hindrance to Export Orientation in Africa." *Journal of African Economics* 8 (4):578-616.
- Grier, Kevin B., and Tullock, Gordon (1987) "An Empirical Analysis of Cross-National Economic Growth." 1950-1980. Unpublished Manuscript. Pasadena; California Inst. Tech. (December).
- Hansen, H. and F. Tarp (2000). "Aid effectiveness disputed." *Journal of International Development*, 12, 375-398.
- F. Tarp (2001). "Aid and growth regressions." *Journal of Development Economics*, 64, 547-570.
- Harms, P and Lutz, M. (2004). "The Macroeconomic Effects of Foreign Aid: A Survey." *Universitat St. Gallen, Department of Economics, Discussion Paper, September, 2004 p.p.11*
- His Majesty's Government Ministry of Finance. *Economic Survey. Fiscal year 1994/95*. Department of Printing, Singha Durbar. Kathmandu, Nepal.
- His Majesty's Government Ministry of Finance. *Economic Survey. Fiscal year 2002/03*. Department of Printing, Singha Durbar. Kathmandu, Nepal
- His Majesty's Government Ministry of Finance. *Economic Survey. Fiscal year 2004/05*. Department of Printing, Singha Durbar. Kathmandu, Nepal
- His Majesty's Government Ministry of Finance. *Foreign Aid Policy. Fiscal year 2002*. Cormayogi Printing Press, Thapathali, Kathmandu, Nepal.
- Hossain, M. Siitonen, L and Sharma S, (2006). "Development Co-operation for Conflict Prevention and Conflict Resolution." *University of Helsinki. Institute of Development studies*.
- Informal Sector Service Center: *Nepal Human Rights Yearbook 2004*. Kathmandu: INSEC. (2005)
- Kanbur, R. (2000). "Aid, conditionality and debt in Africa." In F. Tarp (ed.), 409-22.
- Kormendi, R. C. (1983). "Government Debt, Government Spending and Private Sector Behaviour," *American Economic Review* , 73, December, 944-1010.
- Meguire, P. G. (1985). "Macroeconomic Determinants of Growth:

- Cross Country- Evidence.” *J. Monetary Econ.* 16 (September):141-63.
- Krueger, Anne O., Constantine M., and Vernon W. R. (1989). “Aid and Development”
- Library of Congress- Federal Research Division (2005). “Country Profile: Nepal.” (November)
<http://lcweb2.loc.gov/frd/cs/profiles/Nepal.pdf>
- Mankiw, N. Gregory. (1995) “The Growth of Nations.” *Brookings Papers on Economic Activity*, no. 1.
- Margaret, W. F. (1966). “Foreign Aid and Politics in Nepal: A Case Study.” *Annals of the American Academy of Political and Social Science*. Vol. 366, *American Civilization: Its Influence on Our Foreign Policy*. pp185-186. (July)
- McKinley, T., International Poverty Centre (2005). “Why is ‘Dutch Disease’ always a disease? The Macroeconomic Consequences of Scaling Up ODA.” Working paper number 10, (November)
- Mellor, J.W. and Masters, A.W. (1991). “The Changing Roles of Multilateral and Bilateral Foreign Assistance,” in Uma Lele and Ijaz Nabi, eds., *Transitions in Development: The Role of Aid and Commercial Flows*. San Francisco: ICS Press, , p. 361.
- Mihaly, B. E. (2002). “Foreign Aid and Politics in Nepal: A Case Study.” Reprint. Nepal, Himal Books, lx, 238 p., (pbk). ISBN 99933-43-40-4.
- Morris, J. (1966). “Foreign Aid and Politics in Nepal: A Case Study. Nepal and the Gurkhas.” *International Affairs (Royal Institute of International Affairs)*. Vol. 42, No.2, *Britain East of Suez*. pp338-339. (April)
- Mosley, Paul; (1987). Hudson, John and Horrell, Sarah “Aid, the Public Sector and the Market in Less Developed Countries.” *The Economic Journal*, 97, (September), 616-641.
- Nkusu, M. (2004). “Aid and the Dutch Disease in Low-Income Countries: Informed Diagnoses for Prudent Prognoses”. IMF Working Paper WP/04/49, Washington DC:IMF.
- Nyoni, T. S.(1998). “Foreign Aid and Economic Performance in Tanzania”. *World Development* 26 (7): 1235-40.
- Ogun, O. (1995). “Real Exchange Rate Movements and Export Growth: Nigeria, 1960 1999”, *African Economic Research Consortium Research Paper*.
- Papnek, G. (1973). “Aid, Foreign Private Investment, Savings, and Growth in Less Developed Countries.” *Journal of Political Economy*. 81, (February). 120-130.

- Rajan, Raghuram G. and Arvind Subramanian (2005). "What Undermines Aid's Impact on Growth?" June Draft. Washington D.C.: World Bank.
- Thapa, B. N. (2002). "An Econometric Analysis of the impact of real effective exchange rate on economic activities in Nepal." Occasional paper. Research Department. NC B. (April).
- The Nepali Institute for Development Studies (2003) "Nepali Women Workers in Foreign Lands: a study conducted for UNIFEM. Kathmandu, July
<http://www.migrationinformation.org/Profiles/display.cfm?id=277>) = sources.
- Torvik, R. (2001). "Learning by doing and the Dutch disease." *European Economic Review* Vol 45 pp285-306.
- White, H. and G. Wignaraja (1992). "Exchange Rates, Trade Liberalization and Aid: The Sri Lankan Experience". *World Development* 20 (10):1471 – 80.
- World Bank (1987). *The World Development Report 1987*. Washington D.C.
- (1991). *The World Development Report 1991*. Washington D.C.
- (2004). *The Global Development Finance*. Washington D.C.

■ *Data Appendix:*

Table A1
Test of residuals: Augmented Dickey-Fuller test

		<i>Eq. 1</i>	<i>Eq.2</i>	<i>Eq.3</i>	<i>Eq.4</i>	<i>Eq.5</i>
ADF test statistic		-3.23	-3.19	-4.15	-3.31	-3.54
Critical value	1%	-3.68	-3.68	-3.67	-3.61	-3.73
	5%	-2.97	-2.97	-2.96	-2.97	-2.99

Ho: the variable has a unit root.

Table B1
Test of residuals: Augmented Dickey-Fuller test

		<i>Eq. 1</i>	<i>Eq.2</i>	<i>Eq.3</i>	<i>Eq.4</i>
ADF test statistic		-4.07	-3.64	-3.95	-4.07
Critical value	1%	-3.67	-3.67	-3.67	-3.67
	5%	-2.96	-2.96	-2.96	-2.96

Ho: The variable has a unit root.