



Foreign Aid and Economic Growth: An Overview of Empirical Literature

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Abstract

This paper provides an overview of the empirical literature on the relationship between foreign aid and economic growth. It reviews key theoretical perspectives, examines major empirical findings, and identifies gaps in the existing literature. The evidence remains mixed, with three main viewpoints emerging: some studies find that aid promotes economic growth, others argue that it hinders growth, while a third group suggests that its effectiveness depends on country-specific factors such as institutions and policy environment. In light of these mixed findings, the paper highlights the need for more refined analytical approaches. Future research should focus on developing models that better capture the complexity of the aid-growth relationship and account for the various factors influencing its outcomes.

Keywords: Economic growth, Foreign aid, Review of literature.

1. Introduction

The impact of foreign aid on economic growth of the recipient country has been a subject of intense debate in the last three decades. Theoretically, foreign aid is expected to promote economic growth of recipient country due to its role in complimenting the domestic resource gap. Chenery and Strout (1966) posit that developing countries face two major resource gaps, savings and foreign exchange gaps. The gaps restrict the process of growth and development thereby creating underdevelopment and high rates of poverty. In view of the fact that rich countries and multinational corporations are vastly endowed with funds and capacity, therefore international community expect them to assist developing countries, by not only providing funds but also providing development programmes assistance. Poor rates of economic growth and low level of development in most of the developing countries has raised the empirical question of whether foreign aid really stimulates growth and development of developing countries. Numerous empirical studies have addressed this question but the findings are rather mixed and inconclusive.

The findings of the past studies categorized into three main strands of literature. The first strand believes that foreign aid has positive and direct impact on economic growth and the overall development. The second strand of literature argued that the positive impact of foreign aid on growth and development is conditional to certain factors such as macroeconomic policy, institutional quality, level of corruption etc., while the last strand consists of pessimistic view on foreign aid-growth relationship. This view holds that foreign aid has negative impact on growth and development of recipient countries. Against this background, this paper intends to provide an overview of empirical literature on this matter and we highlight the merits and shortcomings of the past studies and identifying the existing gap in the literature.

The rest of the paper is organized as follows. The second section discusses the theoretical models that extensively used in examining the aid-growth relationship. The third section provides a review of empirical literature. The fourth section highlights the gaps in the literature, while the last section presents a summary and conclusion.

2. Review of Theoretical Models on Foreign Aid-Growth

Two major aid theories, namely; the theory of *Two-Gap Model* proposed by Chenery and Strout (1966) and the *Poverty Trap Model* developed by Nelson (1956) demonstrate the role of foreign aid in promoting growth. This section provides a brief review of these two theories by which their major pitfalls are revealed. The original presentations of these models are based on mathematical approach, yet, for easy understanding we present them in the most simplified version.

2.1. Chenery and Strout Two-Gap Model

The nexus between foreign aid and economic growth is widely described by “two gaps” model. The development of “two gaps” model is based on post-Keynesian growth model developed by Harrod (1939) and

Domar (1946). The theory attests that the economic growth of developing countries is restricted by two gaps – i.e. the savings and foreign exchange gaps (Chenery and Strout, 1966). Savings gap means that domestic savings are too low to finance desired level of investment while the foreign exchange gap refers to insufficiency of foreign currency to finance import of needed capital goods. Foreign capital inflow provided the additional capital resources required to fill the financial gap and thereby permitting the achievement of the targeted level of investment that promotes economic growth. It also provides foreign exchange that fills the difference between import requirements to achieve a certain level of production.

Two-gap model however, is criticized on several grounds. Firstly, the model considers investment as the only source of growth while in fact; growth is determined by number of factors (Harms and Lutz, 2004). In addition, Harms and Lutz (2004) argued that foreign aid is mostly spent on consumption expenditure rather than on capital investment. Thus, foreign aid cannot close the gaps as described by the model. Foreign aid is also constantly associated with perpetuation of corrupt administration, which tends to limit domestic investment and economic growth (Harms and Lutz, 2004). Furthermore, Colman and Nixon (1994) argued that the model is more appropriate for developed countries rather than developing countries. They further stress that the model's assumptions of being independent on each other and the absence of linkage between saving and investment is unrealistic. Gersovits (1982) found evidence, which suggests that the growth of developing countries is constrained by saving gap and not foreign exchange gap. Thus, Gersovits (1981) rejected the two-gap notion of the model. Defendants of this theory however, point out that “two gaps” model are transparent and a flexible framework for achieving the developmental goals of the poor and developing countries.

While the two-gap model has received so much criticism, it remains to be a prototype model for evaluating the impact of aid on growth. Several institutions are still applying this model in implementing their aid policies. In this, Easterly (2003) comments that *“the financing gap model in which aid increases investment and then that investment increases economic growth has dubious theoretical foundations and numerous empirical failings. Yet no other model of aid and growth has risen to take its place. The financing gap model continues to be used today in the World Bank and other institutions making aid policy”* (Easterly, 2003, p.17). Similarly, Devarajan *et al.*, (2002), recognizes the pitfall of the “two gaps” model but they also acknowledge it as transparent and flexible framework for examining, the aid requirements of achieving poverty eradication goal.

2.2. The Poverty Trap Model

Nelson (1956) introduced the model of poverty trap and argues that the main rationale for providing aid to poor countries is to rescue them from poverty trap. Poverty trap refers to a mechanism that creates and perpetuates vicious circle of poverty. The idea behind this theory is that low-income level in developing countries leads to low savings, which eventually leads to low investment. Low level of investment causes low rate of economic growth, which in turn leads to poverty. This mechanism is self-perpetuating and it is termed as poverty trap. Foreign aid is aimed to supplement domestic savings to raise investment level and permitting higher rate of economic growth. This would to some extent help to breakdown the vicious circle of poverty and eventually addresses the poverty trap.

Contrary to two-gap model, poverty trap model does not require the persistent and incremental inflow of foreign funds. It requires the injection of foreign fund only once, just to breakdown the vicious circle and allows a higher rate of growth to take-off. However, as in the case of two-gap model, the poverty trap model is also not without limitations. Harms and Lutz (2004) argue that for poverty to be removed in the poor countries, something more than the injection of foreign fund is required. They insist on the importance of private capital inflows and the role of good governance in the process of addressing poverty. The model has been recently revitalized by Sachs *et al.*, (2004) who re-examined three major sources of poverty trap, that is, increasing returns to scale, saving-income function, and the fertility-income function. However, Kraay and Raddatz (2005) have shown some doubts about the existence the first two traps. Their skepticism is also supported by Global Monitoring Report 2005 which stressed that there is neither. The similar criticism has been brought forward by Easterly (2006).

The empirical criticism about poverty trap model brought forward by Guillaumont and Jeanneney (2006) who provide the summary of empirical skepticism about the Poverty Trap hypothesis. They stressed that among countries which were forty or fifty years ago are low income, a negligible number of them have been able to grow significantly and to move up from this low level. Nevertheless, they argue that many low-income countries remained to be poor and that they share common structural characteristics that create the conditions of a low-level equilibrium, which eventually trap them into poverty and underdevelopment (Guillaumont and Jeanneney, 2006).

3. Review of Empirical Literature

Empirical studies on the impact of aid on growth are divided into three categories. In this section, we provide a concise review of these three schools of thoughts.

3.1. Pro Aid Literature

The pro aid literature maintains that foreign aid plays an important role on the growth by augmenting the savings and foreign exchanges gaps in the recipient countries. These two constraints undermine the process of capital accumulation that limits the economic growth. Earlier studies by Papanek (1973) and Levy (1988) stressed that foreign aid spur economic growth by supplementing domestic savings, augmenting capital stock, and financing investment. They argued that aid increases the productivity in recipient countries, especially when the aid is invested in education and health sectors. These studies triggered the debates on the relationship between aid and growth. However, Papanek (1973) study was pointed out to have some econometric pitfalls such as simultaneity bias and measurement defaults (Ali and Isse, 2005). Despite the shortcomings in the initial studies on foreign aid and economic growth many subsequent studies observed the existence of positive linkage between aid and economic growth. For instance, Dowling and Hiemenz (1983) and Hadjimichael *et al.*, (1995) found significant positive impact of foreign aid on economic growth of the recipient countries despite the argument that the positive effect of aid on growth is not absolute. Meaning that, the growth impact of aid would eventually diminish as the aid

flow increases further. This argument is supported by Dalgaard, et al., (2004), Lensink and White (2001), Hansen and Tarp (2000, 2001), and Durbarray *et al.*, (1998). Similarly, Stern (2002) and Stiglitz (2002) stressed that although aid promotes growth, its impact may be declining in some countries, thus, it may fail to generate the desired results.

Burhop (2005) investigation on the possible causal relationship between aid and growth using time series analysis in 45 developing countries for the period of 1960 to 1999 suggest the existence of causal relationship between aid and growth in some countries while for some countries the relationship does not exist. Likewise, Karras (2006) results from examination of the correlation between growth and aid on annual data from 1960 to 1997 for a sample of 71 poor countries indicate that foreign aid impact on growth is positive and statistically significant. He evidences that when aid continuously increase by \$20 per person the growth rate of real GDP per capita will permanently increase by 0.16 percent.

A recent study by Asteriou (2009) on five South Asian countries namely India, Pakistan, Bangladesh, Nepal and Sri Lanka observed a positive impact of aid on GDP growth. Furthermore, Minoiu and Reddy (2010) also found a significant and robust result that suggests a positive nexus between developmental aid and long-run growth.

3.2. Aid Conditional to Certain Factors

Researchers under this school of thought, endeavor to find the conditions under which foreign aid may have positive impact on growth. According to this view, the positive impact of foreign aid on economic growth depends on certain country-specific factors. These factors include macroeconomic policy environment, political stability and civil liberties, geographical factors, institution quality, and countries' vulnerability to external shocks. Burnside and Dollar's (2000) study was among the first to spark the debate on this view. They argue that the positive impact of aid on growth relation is dependent on macroeconomic environment of the recipient countries. It is asserted that foreign aid can only have a positive influence on economic growth if the recipient country has good macroeconomic policies such as low budget deficit, low inflation, and significant degree of trade openness. The implication of this argument is that donor countries should be more selective in granting the aid to the poor and developing countries. Aid should be allocated according to recipient's performance and commitment in macroeconomic management in order to achieve the desired results. This criterion could be used by bilateral and multilateral donors.

In spite of being so influential, Burnside and Dollar's study have been challenged on several grounds. For example, Easterly *et al.*, (2004) argue that the relationship between policies and aid is not significant, thus, they concluded that Burnside and Dollar's findings were not robust. Likewise, Hansen and Tap (2000) challenged Burnside and Dollars' finding and argued that the results are sensitive to changes in data and model specifications. They stressed that when sample size and model specification is altered, the results also change substantially. In support of Hansen and Tap (2000), Easterly *et al.*, (2004) also applied the same methodology used by Burnside and Dollar (2000) on extended sample size (56 countries) and period (from 1970-1973 to 1990-1993) to re-evaluate Burnside and Dollar's results. Their results rejected Burnside and Dollar (2000) hypothesis that aid effectiveness on economic growth is dependent on macroeconomic policy. Their evidence supported by earlier study by Dalgaard and Hansen (2000) who argued that foreign aid could spur economic growth irrespective to quality of recipients' macroeconomic policy. In the same manner, Guillaumont and Chauvet (2001) found evidence that foreign aid work positively in countries with difficult economic environments characterized by unstable terms of trade and natural disaster. These findings further supported by Collier and Dehn (2001) who found evidence that aid can be effective even in the condition of vulnerable terms of external trade. Thus, in light of Guillaumont and Chauvet (2001) and Collier and Dehn (2001), the implication of Burnside and Dollar (2000) finding cannot be applied for all countries.

Although Burnside and Dollar's (2000) study was challenged in various aspects, a number of successive studies followed their approach to identify the conditions by which aid can positively affect the growth of recipient countries. For instance, later studies revealed that the positive aid-growth nexus is conditional to certain characteristics of the recipient countries such as vulnerability to external shocks (Collier and Dehn, 2001; Guillaumont and Chauvet, 2001); geographical and tropical location (Dalgaard, *et al.*, 2004); degree of political stability and civil liberties (Islam, 2003; Chauvet and Guillaumont, 2002); institutional quality (Burnside and Dollar, 2004); and the timing of aid distribution following an armed civil conflict (Collier and Hoeffler, 2002).

Collier and Hoeffler (2002) believe that timing of aid is crucial for effective impact of aid on growth of post-conflict nations. Therefore, they stress the need for donor countries to phase out aid gradually immediately after conflicts (preferably during the first four years) and gradually reduce back to normal amounts by the end of the first post-war decade. Several authors support this idea. They believe that foreign aid inflows during post-conflict period are very important tool for promoting political stability and development in the post-conflict societies. Hamburg (2001) holds that massive aid inflow soon after conflict is crucial for the people to secure at least minimum living standard and restore the destroyed infrastructures. He insists that these countries need technical assistance to rebuild their institutional structures and create democracy. All of these are pre-requisite to assure a positive impact of aid on economic growth. Contrary to this allege, Ishiyama, *et al.*, (2007) found evidence that suggest aid during the post-conflict period has little or no effect on emergence of democracy in post-conflict counties. Thus, the finding rejected Collier and Hoeffler's (2002) arguments.

3.3. Anti-Aid Literature

The literature under this category advocates that aid has negative effect on growth and it may undermine the economic growth. Pioneer of this view were Friedman (1958) and Bauer (1972) who stressed that donor country should stop sending aid to developing countries as it has no effect on growth. They added that aid would increase the power of recipient governments, creates corruption, and limit development. Bauer (1972) noted that aid impedes growth of private sector investment thereby limiting economic growth and development. The other reasons posited by this school to justify the view that foreign aid hinders economic growth is that foreign aid may induce recipients' governments to reduce efforts of revenue collection from taxes and country's mechanism of raising tax may decline, eliciting the need for additional aid while dissipating the short-term beneficial effects of aid

and creating a culture of dependency (Adam and O'Connell, 1999). Some scholars assert that a continuous increase in the foreign aid inflow could reduce long-run capital accumulation and labor supply of aid recipient countries, which eventually would, reduces the rate of economic growth¹.

Elbadawi (1999) provide evidence that aid harms recipient countries' economy by causing an appreciation of the real exchange rate. The appreciation of real exchange rate can lead to loss of country's competitiveness that affects the balance of trade position of the country that could hurt the overall economic performance of the country in the long run². This argument was supported by White and Wignaraja (1992) in the case of Sri Lanka. However, studies by Nyoni (1998), Sackey (2001), and Quattara and Strobl (2003) provided contrasting results. These studies indicated that foreign aid flow is associated with real exchange rate depreciation. Issa and Ouattara (2004) indicate that foreign aid inflow is not associated with foreign exchange appreciation and therefore the hypothesis for Dutch disease impact of foreign aid is rejected. Nonetheless, there is some evidence, which show that the aid impact on growth is null. For instance, Lensink and Morrissey (2000) study found absence of any significant relationship between foreign aid and growth in developing countries.

Furthermore, Burke and Ahmadi-Esfahani (2006) also observed that aid does not promote growth because of its crowding out effects on domestic savings. Based on three South East Asian countries (Thailand, Indonesia and the Philippines) and using a simultaneous equation model the found that aid has insignificant impact on growth but it does not crowd out domestic savings. Indeed, the panel data cointegration analysis of six poorest and highly aid dependent African countries indicates that foreign can impose negative effects on economic growth in the long run (Mallik, 2008).

There is also an argument that asserts that aid can hurt growth of recipient country when it is so volatile. This argument is supported by Neanidis and Varvarigos (2009), Bulir and Hamann (2003), and Arellano et al., (2005). In particular, Bulir and Hamann (2003) and Arellano et al. (2005) documented that volatility of foreign aid can result into a huge loss of welfare in recipient countries. The study on median welfare cost of business cycles in developing countries by Pallage and Robe (2003) also supports the idea that aid volatility can results into huge welfare costs in developing countries. Ramey and Ramey (1995) have indeed shown that aid volatility has long-term negative impact on economic growth of aid recipient countries.

Rajan and Subramanian (2005) assert that the foreign aid may have undesirable effects of competitiveness of the recipient's exports and this may be the reason for lack of healthy positive relationship between aid and growth. This argument is supported by the evidence that the share of intensive labor and tradable industries in the manufacturing industries decreases with increase in foreign aid. This observation is ~~also~~ consistent with what is commonly termed as Dutch disease. In Dutch disease, it is explained that over devaluation of national currency hurts exporting manufacturing industries by making their goods less competitive with other nations thereby increasing imports and decreasing export and hence hurting the overall productivity, thus, leading to low growth. Prati and Tressel (2006) suggest that aid volatility is a key factor of Dutch disease effects on aid for recipient countries. They propose that developing countries need to adjust the net domestic assets of their central banks through monetary and fiscal policy decisions to smooth out the aid-driven fluctuations of their balance of trade and support their exports.

3.4. Contemporary and Recent Literature

Recent studies on foreign aid and economic growth have moved beyond the earlier debate of whether aid works, and instead focus on understanding how, when, and under what conditions aid can be effective. This shift reflects a growing recognition that the impact of aid is not uniform across countries, but rather depends on a range of institutional, economic, and political factors.

One important theme in the recent literature is the role of institutions. For example, Axel Dreher et al. (2018) show that the effectiveness of aid varies considerably depending on the quality of governance and institutions in recipient countries. In environments where institutions are weak, the potential benefits of aid may not be fully realized. This suggests that improving institutional capacity is essential for maximizing the growth impact of foreign aid.

At the same time, newer empirical studies provide more optimistic evidence compared to earlier pessimistic views. Using a quasi-experimental approach, Sebastian Galiani et al. (2017) find that foreign aid can have a positive effect on economic growth, particularly when it is sustained over time and properly targeted. Their findings highlight the importance of consistency and long-term commitment in aid flows.

Another area that has received increasing attention is the composition of aid. Rather than treating aid as a single aggregate, recent studies emphasize that different types of aid may have different effects. For instance, Markus Brückner and Antonio Ciccone (2018) suggest that aid directed toward productive sectors such as infrastructure, education, and health tends to have a stronger impact on growth than general budget support. This supports the argument that disaggregating aid is crucial for understanding its effectiveness.

In addition, the issue of aid volatility has become an important concern in recent years. George Kyrtsov and Theodora Metaxas (2020) find that unpredictable and fluctuating aid flows can create macroeconomic instability and weaken long-term growth performance. This implies that not only the amount of aid matters, but also its reliability and predictability.

Recent literature also revisits the role of domestic policies in shaping aid effectiveness. David Fielding (2018) shows that aid tends to be more effective in countries with sound macroeconomic policies, although it can still generate positive outcomes in less favorable environments if properly managed. This suggests that policy environment continues to play an important, but not exclusive, role.

Finally, there is growing interest in how donor behavior and geopolitical considerations influence aid outcomes. Axel Dreher and Andreas Fuchs (2019) provide evidence that aid allocation is often driven by political and strategic interests rather than purely developmental goals. This may reduce the effectiveness of aid in promoting economic growth.

¹ See for example Bauer (1982), (1991); and Gong and Zou (2001)

² See Wijnbergen, S. Van (1984), "The Dutch Disease: A Disease After All?", *Economic Journal*, Vol. 4, pp. 373:41.

Overall, the recent literature presents a more balanced and nuanced view of the aid-growth relationship. Instead of asking whether aid works in general, current research emphasizes that its effectiveness depends on factors such as institutional quality, sectoral allocation, policy environment, and stability of aid flows. This perspective provides a deeper understanding of how foreign aid can contribute to sustainable economic growth in developing countries.

4. Observed Gap in the Literature

The review presented above clearly shows that there is a large and growing body of literature on the relationship between foreign aid and economic growth. Despite this, there is still no clear agreement on whether aid promotes or hinders growth. While many studies use similar econometric approaches, they often arrive at very different conclusions. Some find that aid has a positive effect on growth, others report negative effects, and some suggest that the impact of aid depends on specific conditions within recipient countries.

One possible explanation for these mixed results lies in the limitations of the methods used. Many of the models applied in earlier studies are highly sensitive to changes in data, variables, or estimation techniques. As a result, even small differences in methodology can lead to different outcomes. This suggests a need for more robust and flexible analytical frameworks that can better capture the complexity of the aid-growth relationship. Future research should therefore focus on improving existing models or developing new ones that take into account the multiple channels through which aid influences economic performance.

Another important issue is the heavy reliance on cross-country studies. Although these studies provide useful insights, they often lead to broad generalizations that may not hold in all contexts. In reality, countries differ significantly in terms of their economic structures, political systems, and institutional capacities. For instance, the challenges faced by countries in Sub-Saharan Africa are quite different from those in East Asia or Latin America. This means that conclusions drawn from cross-country analyses may not accurately reflect the situation in individual countries. Future research should therefore place greater emphasis on country-specific or region-specific studies in order to produce more relevant and reliable findings.

In addition, while earlier studies - particularly those influenced by Burnside and Dollar (2000) - highlight the importance of macroeconomic policies, more recent work suggests that the issue is more complex. Factors such as institutional quality, governance, and the ability of countries to effectively absorb aid also play a critical role. At the same time, not enough attention has been given to the role of donors. Donor priorities, conditions, and allocation strategies may also influence how effective aid is, and this remains an area that deserves further investigation.

Another limitation in the literature is the common practice of using aggregate measures of aid, such as Official Development Assistance (ODA). This approach assumes that all types of aid have the same effect, which is unlikely to be the case. In reality, different forms of aid serve different purposes, and their impacts on growth may vary. As recent studies suggest, looking at the composition and sectoral allocation of aid can provide more meaningful insights. Future research should therefore consider breaking down aid into its different components.

Finally, the issue of timing has not been adequately addressed in many studies. The impact of aid on economic growth is unlikely to occur immediately; instead, it may take time for its effects to materialize. Ignoring this time dimension may lead to incomplete or misleading conclusions. Future studies should therefore incorporate time lags and distinguish between short-term and long-term effects of aid.

5. Conclusion

This paper has provided an overview of the empirical literature on the relationship between foreign aid and economic growth. Although a substantial amount of research has been conducted on this topic, there is still no clear consensus on how aid affects growth. While some studies find that aid contributes positively to economic performance, others suggest that its impact is conditional on certain factors, and some even argue that aid may hinder growth.

One of the key observations from this review is that many studies rely on similar data sets and analytical techniques, yet arrive at different conclusions. This suggests that the variation in findings may be partly due to weaknesses in the models used, as well as differences in how the analysis is conducted. In addition, the widespread use of cross-country approaches has often resulted in generalized conclusions that may not fully capture the diversity of experiences across countries.

Given that countries differ widely in terms of their economic conditions, political environments, and institutional structures, it is important for future research to take these differences into account. While recent studies have made some progress in incorporating country-specific factors, there is still room for further improvement. Moreover, future research should also pay closer attention to the role of donors. The way aid is allocated, the conditions attached to it, and the priorities of donor countries may all influence its effectiveness. Addressing issues such as endogeneity will also be important in improving the reliability of empirical findings.

Finally, more attention should be given to how aid is distributed across sectors. Disaggregating aid and examining its impact at a more detailed level can help identify which types of aid are most effective in promoting economic growth. This would provide more practical insights for policymakers and contribute to a better understanding of the aid-growth relationship.

References

- Adam, C., & O'Connell, S. A. (1999). Aid, taxation and development in Sub-Saharan Africa. *Economics and Politics*, 11(3), 225–253.
- Ali, M., & Isse, H. S. (2005). An empirical analysis of the effect of aid on growth. *International Advances in Economic Research*, 11(1), 1–11.
- Arellano, C., Bulíř, A., Lane, T. D., & Lipschitz, L. (2005). *The dynamic implications of foreign aid and its variability* (IMF Working Paper No. 05/119). International Monetary Fund.
- Asteriou, D. (2009). Foreign aid and economic growth: New evidence from a panel data approach for five South Asian countries. *Journal of Policy Modeling*, 31(1), 155–161.
- Bauer, P. T. (1972). *Dissent on development*. Harvard University Press.
- Brückner, M., & Ciccone, A. (2018). Commodity prices and economic growth. *The Economic Journal*, 128(616), 1905–1940.
- Bulíř, A., & Hamann, A. J. (2003). Aid volatility: An empirical assessment. *IMF Staff Papers*, 50(1), 64–89.

- Burke, P. J., & Ahmadi-Esfahani, F. Z. (2006). Aid and growth: A study of South East Asia. *Journal of Asian Economics*, 17(2), 350–362.
- Burhop, C. (2005). Foreign assistance and economic development: A reevaluation. *Economics Letters*, 86(1), 57–61.
- Burnside, C., & Dollar, D. (2000). Aid, policies, and growth. *American Economic Review*, 90(4), 847–868.
- Burnside, C., & Dollar, D. (2004). *Aid, policies, and growth: Revisiting the evidence* (World Bank Policy Research Working Paper No. 3251). World Bank.
- Chauvet, L., & Guillaumont, P. (2002). *Aid and growth revisited: Policy, economic vulnerability and political instability*. Paper presented at the ABCDE Europe Conference.
- Chenery, H. B., & Strout, A. M. (1966). Foreign assistance and economic development. *American Economic Review*, 56(4), 679–733.
- Collier, P., & Dehn, J. (2001). *Aid, shocks, and growth* (World Bank Policy Research Working Paper No. 2688). World Bank.
- Collier, P., & Hoeffler, A. (2002). *Aid, policy, and growth in post-conflict societies* (World Bank Policy Research Working Paper No. 2902). World Bank.
- Coleman, D., & Nixon, F. (1994). *Economics of change in less developed countries*. Harvester Wheatsheaf.
- Dalgaard, C.-J., & Hansen, H. (2000). *On aid, growth and good policies* (CREDIT Research Paper No. 00/17). Centre for Research in Economic Development and International Trade.
- Dalgaard, C.-J., Hansen, H., & Tarp, F. (2004). On the empirics of foreign aid and growth. *The Economic Journal*, 114(496), F191–F216.
- Devarajan, S., Miller, M. J., & Swanson, E. V. (2002). *Goals for development: History, prospects, and costs* (World Bank Policy Research Working Paper No. 2819). World Bank.
- Domar, E. D. (1946). Capital expansion, rate of growth, and employment. *Econometrica*, 14(2), 137–147.
- Dowling, J. M., & Hiemenz, U. (1983). Aid, savings, and growth in the Asian region. *The Developing Economies*, 21(1), 3–13.
- Dreher, A., & Fuchs, A. (2019). Rogue aid? An empirical analysis of China's aid allocation. *Canadian Journal of Economics*, 52(3), 988–1023.
- Dreher, A., Langlotz, S., & Marchesi, S. (2018). Information transmission and aid effectiveness. *European Economic Review*, 108, 131–150.
- Durbarray, R., Gemmell, N., & Greenaway, D. (1998). *New evidence on the impact of foreign aid on economic growth* (CREDIT Research Paper No. 98/8). Centre for Research in Economic Development and International Trade.
- Easterly, W. (2003). Can foreign aid buy growth? *Journal of Economic Perspectives*, 17(3), 23–48.
- Easterly, W. (2006). The big push déjà vu: A review of Jeffrey Sachs's *The End of Poverty*. *Journal of Economic Literature*, 44(1), 96–105.
- Easterly, W., Levine, R., & Roodman, D. (2004). New data, new doubts: A comment on Burnside and Dollar's "Aid, policies, and growth". *American Economic Review*, 94(3), 774–780.
- Elbadawi, I. A. (1999). External aid: Help or hindrance to export orientation in Africa. *Journal of African Economies*, 8(4), 578–616.
- Fielding, D. (2018). Aid and growth: Dynamic panel analysis. *Oxford Bulletin of Economics and Statistics*, 80(4), 719–742.
- Friedman, M. (1958). Foreign economic aid. *Yale Review*, 47(4), 501–516.
- Galiani, S., Knack, S., Xu, L. C., & Zou, B. (2017). The effect of aid on growth: Evidence from a quasi-experiment. *Journal of Economic Growth*, 22(1), 1–33.
- Gersovitz, M. (1982). The estimation of the two-gap model. *Journal of International Economics*, 12(1–2), 111–123.
- Guillaumont, P., & Chauvet, L. (2001). Aid and performance: A reassessment. *Journal of Development Studies*, 37(6), 66–92.
- Guillaumont, P., & Jeanneney, S. G. (2006). *Big push versus absorptive capacity: How to reconcile aid effectiveness and aid allocation?* UNU-WIDER Conference Paper.
- Hadjimichael, M. T., Ghura, D., Mühleisen, M., Nord, R., & Uçer, E. M. (1995). *Sub-Saharan Africa: Growth, savings, and investment, 1986–93* (IMF Occasional Paper No. 118). International Monetary Fund.
- Hamburg, D. A. (2002). *No more killing fields: Preventing deadly conflict*. Rowman & Littlefield.
- Hansen, H., & Tarp, F. (2000). Aid effectiveness disputed. *Journal of International Development*, 12(3), 375–398.
- Hansen, H., & Tarp, F. (2001). Aid and growth regressions. *Journal of Development Economics*, 64(2), 547–570.
- Harms, P., & Lutz, M. (2004). *The macroeconomic effects of foreign aid* (Discussion Paper). University of St. Gallen.
- Harrod, R. F. (1939). An essay in dynamic theory. *The Economic Journal*, 49(193), 14–33.
- Ishiyama, J., Sanders, K., & Breuning, M. (2007). Foreign aid and democratization in post-conflict societies. *MidSouth Political Science Review*, 9(1), 19–34.
- Islam, M. (2003). Political regimes and aid effectiveness. *The Journal of Developing Areas*, 37(1), 35–53.
- Issa, H., & Ouattara, B. (2004). *Foreign aid flows and real exchange rate* (Discussion Paper). University of Manchester.
- Karras, G. (2006). Foreign aid and long-run economic growth. *Journal of International Development*, 18(7), 15–28.
- Kraay, A., & Raddatz, C. (2005). *Poverty traps, aid, and growth* (World Bank Policy Research Working Paper No. 3631). World Bank.
- Kyrtsoy, C., & Metaxas, T. (2020). Aid volatility and growth. *Economic Modelling*, 89, 224–234.
- Lensink, R., & Morrissey, O. (2000). Aid instability as a measure of uncertainty and the positive impact of aid on growth. *Journal of Development Studies*, 36(3), 30–48.
- Lensink, R., & White, H. (2001). Are there negative returns to aid? *Journal of Development Studies*, 37(6), 42–65.
- Levy, V. (1988). Aid and growth in Sub-Saharan Africa. *European Economic Review*, 32(9), 1777–1795.
- Mallik, G. (2008). Foreign aid and economic growth: A cointegration analysis of the six poorest African countries. *Economic Analysis & Policy*, 38(2), 251–260.
- Minoiu, C., & Reddy, S. G. (2010). Development aid and economic growth: A positive long-run relation. *Quarterly Review of Economics and Finance*, 50(1), 27–39.
- Neanidis, K. C., & Varvarigos, D. (2009). Aid volatility and economic growth. *European Journal of Political Economy*, 25(4), 447–462.
- Nelson, R. R. (1956). A theory of the low-level equilibrium trap in underdeveloped economies. *American Economic Review*, 46(5), 894–908.
- Nyoni, T. S. (1998). Foreign aid and economic performance in Tanzania. *World Development*, 26(7), 1235–1240.
- Pallage, S., & Robe, M. A. (2003). On the welfare cost of economic fluctuations in developing countries. *International Economic Review*, 44(2), 677–698.
- Papanek, G. F. (1973). Aid, foreign private investment, savings, and growth in less developed countries. *Journal of Political Economy*, 81(1), 120–130.
- Prati, A., & Tresselt, T. (2006). *Aid volatility and Dutch disease* (IMF Working Paper). International Monetary Fund.
- Ouattara, B., & Strobl, E. (2003). *Do aid inflows cause Dutch disease?* (Discussion Paper). University of Manchester.
- Rajan, R. G., & Subramanian, A. (2005). *What undermines aid's impact on growth?* (IMF Working Paper No. 05/127). International Monetary Fund.
- Ramey, G., & Ramey, V. A. (1995). Cross-country evidence on the link between volatility and growth. *American Economic Review*, 85(5), 1138–1151.
- Sachs, J. D., McArthur, J. W., Schmidt-Traub, G., Kruk, M., Bahadur, C., Faye, M., & McCord, G. (2004). Ending Africa's poverty trap. *Brookings Papers on Economic Activity*, 2004(1), 117–240.
- Sackey, H. A. (2001). *External aid inflows and the real exchange rate in Ghana* (AERC Research Paper No. 110). African Economic Research Consortium.
- Stern, N. (2002). *Making the case for aid*. World Bank.
- Stiglitz, J. E. (2002, April 30). Overseas aid is money well spent. *Financial Times*.
- White, H., & Wignaraja, G. (1992). Exchange rates, trade liberalization, and aid: The Sri Lankan experience. *World Development*, 20(10), 1471–1480.