WORKING PAPER 128/2015

ANALYZING THE AID EFFECTIVENESS ON THE LIVING STANDARD: A CHECK-UP ON SOUTH EAST ASIAN COUNTRIES

Zareena B. Irfan
Arpita Nehra
Mohana Mondal

MADRAS SCHOOL OF ECONOMICS
Gandhi Mandapam Road
Chennai 600 025
India

October 2015

Analyzing the Aid Effectiveness on the Living Standard: A Check-up on South East Asian Countries

Zareena Begum Irfan
Associate Professor, Madras School of Economics
zareena@mse.ac.in

Arpita Nehra
Madras School of Economics

and

Mohana Mondal
Research Associate, Madras School of Economics

WORKING PAPER 128/2015

October 2015

Price : Rs. 35

MADRAS SCHOOL OF ECONOMICS
Gandhi Mandapam Road
Chennai 600 025
India

Phone: 2230 0304/2230 0307/2235 2157
Fax : 2235 4847/2235 2155
Email : info@mse.ac.in
Website: www.mse.ac.in

Analyzing the Aid Effectiveness on the Living Standard: A Check-up on South East Asian Countries

Zareena Begum Irfan, Arpita Nehra and Mohana Mondal

Abstract

The present research work aims to analyse the effect that the disaggregated developmental aid has had on the health status and the standard of living in the urban sector after the MDGs were established. Infant Mortality and Improved sanitation facilities are taken as indicators for health status and urbanisation respectively; and the relationship between disaggregated health aid with infant mortality rate and disaggregated aid for water and sanitation with improved sanitation facilities was analysed for the years from 2002-2012 using data from 8 developing countries of Southeast Asia. Findings suggest that the developmental aid has not been effective in both the health sector and urbanisation sector. Moreover, improvement in health status has been growth driven. With the advent of the Sustainable Development goals; the most important thing to ensure is that the disbursed aid is used effectively to achieve the very purposes it is being given for and to reduce the gaps in various classes of developing countries in the region.

Keywords: *Disaggregated developmental aid, Aid for water and sanitation, Health Aid, Millennium Development Goals (MDG), Infant Mortality Rate, Improves sanitation Facilities, GDP, Health Expenditure, Aid Effectiveness*

JEL Codes: *I130, O11, Q010, O530, I310, I380*

ACKNOWLEDGEMENT

The authors are grateful to their parent institute, which provided them the infrastructural benefit of conducting the research work. Authors are thankful to Dr. Brinda Viswanathan for her feedback which helped us to improve the quality of paper. The paper has been communicated to the Journal of Urban Management and is currently under review.

Zareena B. Irfan
Arpita Nehra
Mohana Mondal

INTRODUCTION

In the midst of 1980s the Official Development Assistance (ODA) as a percentage of the Gross national Income had declined which was deepened by even steeper ODA reduction with absolute ODA decreasing. Hence, the immediate need was to bring back the development issues on the focus; precisely the reason for which the Eight Millennium Development Goals were introduced.

One of the main focuses of the MDG's had been on increasing the ODA for the achievement of the eight goals. The effectiveness of ODA has been under scrutiny since long; allegedly it has not been the developmental aid but the economic growth which has contributed to reduction of poverty and improvement in other basic health and living standard indicators. Roberts (2010) mentioned that due to this focus; 'the MDGs enable a culture of dependency and strengthen the governing regimes of corrupt elite' and that the foreign aid and developmental assistance have not mitigated the effects of corruption.

The present study is another attempt to analyse the effectiveness of aid in health and urbanisation sector.

LITERATURE REVIEW

The Role of Developmental Aid

The central theoretical backbone in aid effectiveness literature can be traced back to the two-gap model (Chelery and Strout, 1966). The paper had provided principles for both early aid policies and model specifications of many empirical papers which focused on relationship between aid and growth and aid and savings.

Gillivray (2004) had concluded that an increase in aid promotes growth along with reduction in poverty. Along with Gilllivray (2004),

Mishra and Newhouse (2009) have emphasised that better policies would result in more effective aid. Further Baulch (2006) and Dreher *et. al*. (2014) and Hailu and Hsukda (2012) give some evidence that aid donation was affected by the performance on the indicators. Jones (2006) emphasizes the role of UNDP in shaping up of the educational development and examines the rationale of abandoning education as a priority sector by UNDP. Clemens *et. al* (2007) mention that aid can cover only the "necessary costs of Millennium Development Goals" and not the sufficient costs; hence it could be blamed for false failures.

Effectiveness of Health Aid

There has been quite a debate about the effects that health aid has on infant mortality; harmful and insignificant effects of aid and infant mortality has been observed by Boone (1996) and Burnside and Dollar (2005). However, Fielding *et. al*. (2005) find a statistically significant and beneficial relationship between overall aid and mortality. The first study where effectiveness of foreign aid on the health status was analysed had been undertaken by Williamson (2008).However, her results, in fact, indicated that foreign aid was ineffective at increasing overall health which could be because the amounts given as a percentage of overall foreign aid were small.

Mishra and Newhouse (2009) found the doubling of health aid is associated with a 7 percent increase in health expenditure. The estimates suggested that the effect of doubling health aid on infant mortality was small relative to goals envisioned by the MDGs. Wilson (2011) again concluded that that Developmental aid to health (DAH) had no effect on infant mortality; on the other hand, economic growth had a stronger negative effect on infant mortality. It was observed that the countries receiving high levels of DAH were doing no better than the countries receiving low levels of the same.

Effectiveness of Aid for Water and Sanitation

Not many studies have been done to see the effect of aid particularly given to this sector on improvement of sanitation facilities. In fact, only one study done in African study area could be found and has been reviewed here.

Salami *et. al*. (2011) observed the lack of clarity about whether the provision of sustainable access to safe drinking water and basic sanitation had been given requisite financial and other support by SSA policymakers and donors. It was observed that over a period of 1990 to 2008 improved water source increased by a marginal increase of less than 1 percent a year. To meet the MDG target, the rate had to double and for sanitation, the coverage rate had to increase four-fold. Moreover, largest proportion of people without improved drinking water and sanitation services were the poor people. However, the performance was seen to be heterogeneous across the countries.

On the basis of previous literature on the effectiveness of disaggregated aid for Health and education sector, the present study aims to develop an econometric model i) to assess the effectiveness of the health aid for the improvement in health status of the country ii) to develop the same for the aid for water and sanitation for the improvement of sanitation facilities in the country representing the urbanisation sector iii) draw some conclusions about the effectiveness of the Official Development Assistance.

THEORETICAL FRAMEWORK

Empirical Framework

The econometric methodology draws on precedent of analysis developed for sectors of education and health. In the given study, a dynamic panel data model is estimated using the Generalized Method of Moments (GMMs) as formulated by Roodman (2009) given the endogeniety of the

variables and the presence of autocorrelation. However, an issue still faced was a small sample which consisted of 8 countries over 10 years. Our baseline Dynamic panel data model would take the form:

$$Log\ Z_{rt} = \alpha logA_{rt-1} + \gamma logZ_{rt-1} + \beta logX_{rt-1} + \mu Y_{rt} + \varepsilon_{it} \quad (1)$$

Where $Log\ Z_{rt}$ represents the log of the variable is the main indicator of the health and the urbanisation sector respectively, $logA_{rt-1}$ is the lagged log of disaggregated aid per capita (health aid in case of health sector model and aid for water and sanitation facilities in urbanisation sector), X_{rt-1} is the vector of log of control variables like GDP, population etc. and Y_{rt} is the vector of other control variables if included in the model.

Model Specification

We seek to build two models in the given study: One, which analyses the effectiveness of disaggregated health aid on health sector and the second, which analyses the effectiveness of disaggregated aid for water and sanitation on the urbanisation sector.

Disaggregated Aid Effectiveness in Health Sector

Mishra and Newhouse (2009) give four reasons why Infant Mortality rate represents the best indicator for the health status of a country. Moreover Boon (1996), Mishra and Newhouse (2009) have said that greater sensitivity of Infant Mortality Rate to changes in economic conditions makes it suitable to be considered as a 'flash indicator' of the health conditions of the poor and hence, it has been taken in the study to be the dependent variable for the health sector model.

For the Health sector model, again two different models have been constructed- one, with GDP as a control variable and second, with health expenditure as a control variable. This has been done since it is generally presumed that countries with higher GDP would have better health facilities and infrastructure. GDP is generally considered to be a

good proxy to indicate the expenditure on health. However, we would want to see the different ways in which the GDP and Health Expenditure affect the infant mortality. Apart from the reason that GDP captures how money is spent on the health sector; most of the initial studies have analysed the aid effectiveness in the background of economic growth.

Yousuf (2009) mentions the possibility that higher aid might have been given to the countries with higher prevalence of HIV. This would help us to rule out the chances that health aid coefficient would be affected through exerting short-term influence on HIV. The lagged Infant Mortality rates and the fertility rates are included to capture the country's initial health status. The literature of effectiveness of disaggregated aid has quite often evidenced the fungibility of developmental aid (Wagstaff, 2011; Rajan and Subramaniam, 2005; Mishra and Newhouse, 2009) owing to lack of a defined sense of direction of the aid to a particular sector. Hence, we tried to include the other types of disaggregated aid variables as the control variables in our analysis; however, only the aid for social security and services came out to be significant.

The general approach to the dynamic specification is to use the Generalized Method of Moments (GMM) approach. The following regressions are estimated using a system GMM specification:

$$Log\ IM_{rt} = \alpha logA_{rt-1} + \gamma logIM_{rt-1} + \beta logX_{rt-1} + \mu Y_{rt} + \varepsilon_{it}$$

$$\Delta(Log(\ IM_{rt}) = a\Delta log(A_{rt-1}) + \gamma\Delta log(IM_{rt-1}) + \beta log(X_{rt-1}) + \mu\Delta Y_{rt} + \varepsilon_{it} \quad (2)$$

The only difference from the baseline model being that Y_{rt} is replaced by IM_{rt} since the the main indicator of the health sector is the Infant Mortality rate. $LogA_{rt-1}$ would mean the log of health aid per capita.

Disaggregated Aid Effectiveness in Urbanisation Sector

One thing that should be noted is that we are trying to put forward a question that how is the status of living in the urban sector improved

with the aid for water and sanitation given the importance of proper sanitation facilities as an important basic infrastructure facilities required to gain a decent standard of living; and most sensitive to the changes in urbanisation or development, we have taken improved sanitation facilities to be our main indicator for the standard of living in the urbanisation sector. The aid for water and sanitation consequently becomes our main explanatory variable for the urbanisation sector model. Again, given the importance of income-aid effectiveness relationship; and on the basis of previous literature one on aid effectiveness studies we include GDP to be one of the control variables.

We tried to include both Infant mortality rate and the health aid – health aid because of the fungibility issue as we had discussed above, and infant mortality rate and life expectancy to control for the initial health status. However, because of the linear relationship which between the infant mortality rate and the health aid; we had to drop infant mortality rate from our set of control variables. The following came out to be the regression equations that we estimate using a system GMM specification:

$$Log\ ISF_{rt} = \alpha log A_{rt-1} + \gamma log ISF_{rt-1} + \beta log X_{rt-1} + \mu Y_{rt} + \varepsilon_{it}$$
$$\Delta(Log(\ ISF_{rt}) = \alpha \Delta log(A_{rt-1}) + \gamma \Delta log(ISF_{rt-1}) + \beta log(X_{rt-1}) + \mu \Delta Y_{rt} + \varepsilon_{it} \quad (3)$$

Here, our Y_{rt} is ISF_{rt} i.e. the main indicator of the urbanisation sector and A_{rt-1} represents disaggregated aid for water and sanitation. Also the vector X_{rt-1} consists of different set of control variables.

DATA DESCRIPTION

A critique in effectiveness studies has been that both developed and developing countries are taken (Wilson, 2011), hence in the present paper, in order to ensure homogeneity in basic health and income statuses; 8 countries from the Southeast Asia were selected over the

period of 2002-2012 i.e. after the Millennium Development goals were established. The initial data collected consisted of 60 indicators related to urbanisation and health for each of the 8 countries.

The data for disaggregated Official Developmental Assistance were obtained from the OECD database which provides data on ODA commitments by purpose, taken from the Creditor Reporting System (CRS). However, recently studies have started to collect the disaggregated ODA data from the AidData.org given the limitations of the CRS system like omission of many large and significant donors not found in the CRS database. It brings on board the non-OECD bilateral donors and a diverse variety of multilateral financial institutions including regional development banks, many of which are not accounted for by the Credit Reporting Service as well as the World Bank. Also, collecting the data from AidData may have had a potential bias by the aid donors who potentially might chose to inflate their reports of the foreign aid programmes (Yousuf, 2012). Hence, giving more weight to the reliability of data, the study took the data from OECD-CRS system only.

Descriptive Statistics

The Tables 1 and 2 could be used to make some broad conclusions about the variables. We can observe that the value of mean of aid and water and sanitation is not very high as compared to that of health aid with aid for social infrastructure and services with highest value. The differences in min and max values are an indicator of large range of variations in the indicators with an exception of life expectancy which denotes a similarity in health statuses of the various countries.

Table 1: Descriptive Statistics of Variables Included in Health Sector Model

Variable	Observations	Mean	Std. Dev.	Min	Max
Infant Mortality rate	88	28.82	15.43	6.9	69
Health Aid	88	51.48	55.35	0.24	258.33
GDP per capita	88	2217.29	2262.60	317.06	10439.96
Population	88	2.09e+08	3.67e+08	5555245	1.24e+09
Prevalence of HIV	88	0.52	0.42	0.1	1.7
Fertility Rate	88	2.58	0.691	1.412	3.829
Health Expenditure	88	4.27	1.24	2.236	7.318
Aid for social infrastructure and services	88	365.37	298.03	14.01	1112.01

Table 2: Descriptive Statistics of Variables Included in the Urbanisation Model

Variable	Obser-vations	Mean	Std. Dev.	Min	Max
Improved Sanitation facilities	88	61.25	24.29	19.7	95.7
Aid for water and sanitation	88	69.03	83.897	0.96	360.82
GDP per capita	88	2217.29	2262.60	317.06	10439.96
Population	88	2.09e+08	3.67e+08	5555245	1.24e+09
Health aid	88	51.48	55.35	0.24	258.33
Aid for social infrastructure and services	88	365.37	298.03	14.01	1112.01
Life Expectancy	88	69.68	3.83	62.87	75.61
Infant Mortality Rate	88	28.82	15.43	6.9	69

Results and Discussion

Tables 3 and 4 give a brief summary of the results. The coefficient of the main independent variables; log of health aid and log of aid for water and sanitation comes out to be ineffective. However, the sign of health aid co-efficient is negative whereas of aid for water and sanitation is positive. The value of the GMM coefficient for lagged water and sanitation aid is again quite low, 0.002 which means that increase by 1 percent in current aid for water and sanitation, the sanitation facilities would improve only by 0.002 percent.Moreover, the coefficients show that both of the aid for health and water and sanitation are ineffective. Further, the coefficients of lagged dependent variable for both infant mortality rate and improved sanitation facilities are very high, 0.99 and 0.96, respectively which show a high level of persistence and that both the series are nearly a random walk and hence justify the usage of the system GMM estimator.

Also, the relationship of lagged population with infant mortality rate was positive and with improved sanitation facilities was which is quite obvious: Higher populations showcase a lack of family planning and pressure on sanitation facilities which could indeed result in higher incidences of infant mortality rates and poorer sanitation facilities

Table 3: Results of System GMM Estimation for the Health Sector; With GDP as a Control Variable in One Model and Health Expenditure as a Control Variable in the Other Model

Dependent Variable	Log infant mortality rate (per 1000)	
	With Health Expenditure	With GDP
Lagged log infant mortality	0.99 (0.006)***	0.97 (0.002)***
Lagged log health aid per capita	-0.006 (0.002)***	-0.004 (0.001)***
Lagged log GDP per capita	-	-0.05 (0.02)***
Lagged log health expenditure	0.007 (0.004)*	-
Lagged log fertility rate	-0.03 (0.01)***	-
Prevalence of HIV	-0.02 (0.001)***	-0.01 (0.001)***
Lagged log total Population	-	0.34 (0.14)***
Lagged log of aid for social infrastructure and services	0.01 (0.002)***	0.01 (0.002)***
Sargan Test (P-value)	0.415	0.197
AR1 test: P value	0.487	0.745
AR2 test: P value	0.163	0.608
Number of instruments	52	52
Number of countries	8	8
Number of observations	80	80

Table 4: System GMM Estimation Results For the Urbanisation Sector; With Both Health Aid and Infant Mortality Rates Included in One Model and Only Health Aid Included in the Other Model.

Dependent variable	Improved Sanitation Facilities	
	With Health Aid and IMR	With Health Aid
Lagged log Improved Sanitation Facility	0.96 (0.006)***	0.96 (0.003)***
Lagged log aid for water and sanitation	0.002 (0.0006)***	0.002 (0.0006)***
Lagged log GDP per capita	-0.008 (0.002)***	-0.008 (0.001)***
Lagged log population	-0.008 (0.0005)***	-0.008 (0.0004)***
Lagged log health aid	-0.0005 (0.0008)	-0.004 (0.0007)
Lagged Infant Mortality rate	0.0014 (0.005)	-
Lagged log life expectancy	0.09 (0.008)	0.093 (0.002)***
Sargan test	0.129	0.155
AR1 test: P value	0.421	0.430
AR2 test: P value	0.742	0.749
Number of instruments	34	34
Number of countries	8	8
Number of observations	80	80

Note: ***Signicance at 10 percent level, ** Significance at 5 percent level, * Signficance at 1 percent level

The Health Sector Model

The coefficient (-0.006) in case of Health expenditure and (-0.004) in case of GDP would mean that a 1 percent increase in health aid would reduce the infant mortality rate by 0.006 percent or 0.004 percent. The contemporaneous effect of health aid when included in the model with lagged GDP as a control variable was seen to be insignificant and hence it was dropped out of both the models as can be seen from the Table 5.

Table 5: System GMM Estimation Results With Contemporaneous Effect of Health Aid

Dependent Variable	Log Infant Mortality Rate
Log of Lagged Infant Mortality Rate	0.99 (0.007)***
Log of Health aid per capita	-0.003 (0.002)
Log of lagged Health aid per capita	-0.005 (0.002)***
Log of Lagged GDP per capita	-0.07 (0.02)***
Log of lagged population	0.47 (0.15)***
Log of lagged fertility rate	-0.03 (0.01)***
Prevalence of HIV	-0.02 (0.002)***
Lagged aid for social infrastructure and services	0.0004 (0.004)
Log of lagged aid for social infrastructure and services	0.009 (0.003)***
Sargan test (P-value)	0.570
AR1 test: P value	0.824
Number of instruments	52
Number of countries	8
Number of observations	80

The GMM coefficients of lagged health expenditure and lagged GDP are seen to have opposite signs- a negative coefficient of lagged GDP is consistent with the notion of previous literature of GDP having a strong effect on the infant mortality rate or the health status of the country. Higher incomes would mean better health infrastructure, better housing and sanitation facilities and better healthcare facilities and hence better health status. However, a curious outcome is a positive sign of health expenditure which could be indicative of the fact that with an improvement in infant mortality rates; there is a reduction in health expenditures; this might be the case since improving health status and increasing incomes call for reduced public spending and a diversion towards the private spending. Moreover, the developing countries like India are characterised by high out-of-pocket expenditures. Another study where effect of health spending is seen to be positive on infant mortality rate is by Kaldewei (2010) who interprets it in opposite way mentioning that an increase in health expenditure increase the infant

mortality rate as there is targeting of underperforming governorates; higher spending is aimed at improving health outcomes in areas with relatively high infant mortality rates. Also we can observe that, the coefficient of lagged log health aid is higher in case of health expenditure than GDP, i.e. health aid is more effective in case where higher expenditures are done in the areas with high infant mortality rates.

It must be noted that different set of control variables have been used for the models with health expenditure and GDP as control variables- this has been done to eliminate endogeniety and get a valid set of instruments for the models. For example, if fertility rates were used to indicate the initial health status in the GDP model; there could have been some linear relationship between population and fertility rates; hence, in this case the Sargan test, which is the test for valid instruments, was rejected and our main exogenous variables came out to be insignificant; however, when only one of them was included in both the models we got the appropriate results. The Table 6 evidences the argument made above.

Table 6: System GMM Results For the Health Sector When Both Fertility Rates and the Population Were Included as Control Variables in the GDP Model.

Dependent Variable	Infant Mortality rate
Lagged log infant mortality rate	0.95 (0.003)***
Lagged log of Health aid	0.002 (0.001)
Lagged log of Health Expenditure	-0.008 (0.003)**
Lagged log of population	-0.01 (0.007)
Lagged log of fertility rates	0.04 (0.005)***
Lagged log of aid for social security and services	0.02 (0.002)***
AR2 test: P-value	0.245
Sargan test	0.000
Number of instruments	57
Number of countries	8
Number of observations	80

Note: ***Signicance at 10 percent level, ** Significance at 5 percent level, * Signficance at 1 percent level.

The Health related control variables came out to be statistically significant; however, there signs were opposite to what could be generally expected- the GMM coefficients were negative implying a negative relationship between each of fertility rate and prevalence of HIV with Infant mortality rate. The effect of changes in fertility rate on infant mortality has been a subject of debate in the health literature with only a little evidence that decline in fertility has a positive impact on infant mortality (Le Grand and Phillips, 1996). A negative coefficient of HIV prevalence could be interpreted as an evidence of high differential between the rural and urban areas, high fertility rates and HIV prevalence is found majorly in rural areas; even the mortality rates are high in these areas but the decrease in mortality rates in urban areas have been much more than high mortality rates in these rural areas, giving the net effect of overall reduced mortality rates. In fact, the selected study area which comprised south-east Asian developing economies; a differential between educated and uneducated women could also be found.

A positive sign of coefficient of aid for social infrastructure and services with a higher value than that of the health aid was seen and it turned out to be statistically significant which shows that the areas with higher mortality rates have been given more aid to improve the social infrastructure and services; also it might be concluded that the social services for which the aid has been given has not included health services and hence, still there are high incidences of mortality rates.

Urbanisation Model

Moreover, the lagged GDP was surprisingly seen to have a negative relationship with the improved sanitation facilities which is consistent with the study by Salami *et. al*. (2011) who explain this phenomenon saying that it reflects the subdued attention that sanitation sometimes gets in budgetary allocations.

Two separate models were constructed- one with both lagged health aid and lagged infant mortality rates; in this model both health aid and infant mortality rate came out to be insignificant which could partly be due to the linear relationship present between the two. In the other model only the health aid was included; here the health aid, though statistically significant, was seen to have a negative relationship with improved sanitation facilities; however the effect of health aid on the improved sanitation facilities was seen to be very-very small. This could simply mean that like the GDP, health aid meant for improving the infrastructure for sanitation so as to finally result in improving health status has not been allocated effectively for the purpose.

The lagged log life expectancy as expected had a positive impact on the improved sanitation facilities. Life expectancy indicates the health status of a country; hence an increase in life expectancy would lead to better sanitation facilities which could be because of higher demand of better sanitation facilities with an increased health status.

The Review Tests for Validity of the Model

Finally, some review tests are required for unbiased and consistent estimation. The first one being the Sargan test of over identifying restrictions which has the null hypothesis of "the instruments as a group are exogenous", a test that checks the validity of the instruments- the table 3, 5 and 6 show that our p-value of these tests across all the models imply that we cannot reject the null hypothesis and hence, our instruments in GMM estimation are valid. The second is the Arellano-Bond test which analyses whether the model contains enough lags to control for possible autocorrelation with the null hypothesis of "no serial correlation. Results contained in table 3, 4, 5 and 6 show that the specification of the model is valid – we do not have a first or a second order autocorrelation in any of the models.

CONCLUSION

With the target date of Millennium Development Goals approaching and the soon upcoming *'Sustainable Development Goals'*, the previous literature and the present analysis suggests that a high importance to be put on effective use of aid and probably, a higher amount of aid for health and water and sanitation. Moreover, effective monitoring and reporting processes for the disbursed aid should be introduced so as to keep a check on how the developmental aid is being used (though, the cost for the same could be high but it would still be much lesser if compared to the costs of inefficient use of large developmental aid amounts disbursed). Finally, it must be emphasized that Sustainable Developmental Goals must fill the gap left by the MDGs- to broaden the development narrative beyond the growth perspective. Emphasis must also be put on reducing the gaps between various classes. The study must be concluded by observing that till there is a political will and effective employment of the developmental aid and government finances; the objective of development for all is hard to achieve.

REFERENCES

Baulch, B. (2006), "Aid Distribution and MDGs", *World Development, 34*(6), 933-950, Retrieved from doi:10.1016/j.worlddev.2005.11.013.

Boone, P. (1996), "Politics and the Effectiveness of Foreign Aid", *European Economic Review 40* (February (2)), 289–329.

Burnside, C., D. Dollar (2000), "Aid, Policies and Growth", *American Economic Review*, 90(4), 847-868.

Chenery, H. B., A. M. Strout (1966), "Foreign Assistance and Economic Development", *The American Economic Review*, 46(4).

Clemens, M.A., C.J. Kenny and T.J. Moss (2007), "The Trouble with the MDGs: Confronting Expectations of Aid and Development Success", *World Development*, 35, 735-751.

Dreher, A. K., Gehring and S. Klasen (2014), "Gesture Politics or Real Commitment? Gender Inequality and the Allocation of Aid", *World Development*, xx, pp. xxx-xxx.

Hailu, D. and R. Tsukada, (2012), "Is the Distribution of Foreign Aid MDG-Sensitive?", *DESA Working paper 111*, Retrieved from http://www.un.org/esa/desa/papers/2012/wp111_2012.pdf

Jones, P. W. (2006), "UNDP and Educational Development: "An Institutional Policy Analysis", *International Journal of Educational Development,* 605-617.

Jones, W. J. (1997), "The Thoroughgoing Urbanisation of East and Southeast Asia", *Asia Pacific Viewpoint*, 38(3), 237-249.

McGillivray, M. (2004), "Is Aid Effective?", Presented at Foundation for Development Cooperation 'Financing Development Colloquium', Surfers Paradise, Australia.

Mishra, P. and D. Newhouse (2009), "Does Health Aid Matter?", *Journal of Health Economics*, 855-872.

Rajan R.G. and A. Subramaniam (2005), "What Undermines Aid's Impact on Growth?", *National Bureau of Economic research*, WP-11657.

Rippin, N. (2013), "Progress, Prospects and Lessons from the MDGs", Background Research Paper, High Level Panel on the Post-2015 Development Agenda.

Roberts (2010), "U.N. Millennium Development Goals: Foreign Aid v. Economic Freedom", *The Heritage Foundation*, Retrieved from http://report.heritage.org/wm3020

Roodman, D. (2009), "How to Do xtabond2: An Introduction to Difference and System GMM in Stata", *The Stata Journal*, 9(1), 86-136.

Salami, A. M., A. Stampini, C.Kamara Sullivan, and R. Namara (2011), "Development Aid and Access to Water and Sanitation in sub-Saharan Africa", *African Development Bank Group*, WP-140.

Shyu, C.W. (2014), "Ensuring access to Electricity and Minimum Basic Electricity Needs as a Goal for Post-MDG Development Agenda After 2015", *Energy for Sustainable Development*, 19, 29-38.

Wagstaff, A. (2011), "Fungibility and the Impact of Development Assistance: Evidence from Vietnam's Health Sector", *Journal of Development Economics*, 94, 62-73.

Williamson, C.R. (2008), "Foreign Aid and Human Development: The Impact of Foreign Aid to the Health Sector", *Southern Economic Journal*, 75, (1), 188-207.

Wilson, S.E. (2011), "Chasing Success: Health Sector Aid and Mortality", *World Development*, 39(11), 2032-2043.

Yousuf , A.S. (2012), "Impact of health Aid on Infant Mortality Rate", *University of Nottingham*, 2011-2012, Retrieved from http://mpra.ub.uni-muenchen.de/view/subjects/F35.html

MSE Monographs

* Monograph 22/2012
  A Macro-Fiscal Modeling Framework for forecasting and Policy Simulations
  D.K. Srivastava, K. R. Shanmugam and C.Bhujanga Rao
* Monograph 23/2012
  Green Economy – Indian Perspective
  K.S. Kavikumar, Ramprasad Sengupta, Maria Saleth, K.R.Ashok and R.Balasubramanian
* Monograph 24/2013
  Estimation and Forecast of Wood Demand and Supply in Tamilandu
  K.S. Kavi Kumar, Brinda Viswanathan and Zareena Begum I
* Monograph 25/2013
  Enumeration of Crafts Persons in India
  Brinda Viswanathan
* Monograph 26/2013
  Medical Tourism in India: Progress, Opportunities and Challenges
  K.R.Shanmugam
* Monograph 27/2014
  Appraisal of Priority Sector Lending by Commercial Banks in India
  C. Bhujanga Rao
* Monograph 28/2014
  Fiscal Instruments for Climate Friendly Industrial Development in Tamil Nadu
  D.K. Srivastava, K.R. Shanmugam, K.S. Kavi Kumar and Madhuri Saripalle
* Monograph 29/2014
  Prevalence of Undernutrition and Evidence on Interventions: Challenges for India
  Brinda Viswanathan.
* Monograph 30/2014
  Counting The Poor: Measurement And Other Issues
  C. Rangarajan and S. Mahendra Dev
* Monograph 31/2015
  Technology and Economy for National Development: Technology Leads to Nonlinear Growth
  Dr. A. P. J. Abdul Kalam, Former President of India
* Monograph 32/2015
  India and the International Financial System
  Raghuram Rajan
* Mongraph 33/2015
  Fourteenth Finance Commission: Continuity, Change and Way Forward
  Y.V. Reddy

MSE Working Papers

Recent Issues

* Working Paper 117/2015
  Impact of Water and Sanitation on Selected Water Borne Diseases in India
  Brijesh C. Purohit

* Working Paper 118/2015
  Health Shocks and Inter-Generational Transmission of Inequality
  Sowmya Dhanaraj

* Working Paper 119/2015
  Productivity, Energy Intensity and Output: A Unit Level Analysis of the Indian Manufacturing Sector
  Santosh K. Sahu and Himani Sharma

* Working Paper 120/2015
  Health Shocks and Coping Strategies: State Health Insurance Scheme of Andhra Pradesh, India
  Sowmya Dhanaraj

* Working Paper 121/2015
  Efficiency in Education Sector: A Case of Rajasthan State (India)
  Brijesh C Purohit

* Working Paper 122/2015
  Mergers and Acquisitions in the Indian Pharmaceutical Sector
  Santosh Kumar Sahu and Nitika Agarwal

* Working Paper 123/2015
  Analyzing the Water Footprint of Indian Dairy Industry
  Zareena B. Irfan and Mohana Mondal

* Working Paper 124/2015
  Recreational Value of Coastal and Marine Ecosystems in India: A Partial Estimate
  Pranab Mukhopadhyay and Vanessa Da Costa

* Working Paper 125/2015
  Effect of Macroeconomic News Releases on Bond Yields in India China and Japan
  Sreejata Banerjee and Divya Sinha

* Working Paper 126/2015
  Investigating Household Preferences for Restoring Pallikaranai Marsh
  Suganya Balakumar and Sukanya Das

* Working Paper 127/2015
  The Culmination of the MDG's: A New Arena of the Sustainable Development Goals
  Zareena B. Irfan, Arpita Nehra and Mohana Mondal

---

* Working papers are downloadable from MSE website http://www.mse.ac.in

$ Restricted circulation