Annual Review - post April 2018

Title: Macroeconomic Research in Low Income Countries			
Programme Value £ (full life):	£14,735,986	Review Date: June 2018	
Programme Code: 202960	Start Date: March 2012	End Date: March 2020	

Summary of Programme Performance

Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	
Programme Score	A++	A++	A++	A++	A++	A++	
Risk Rating	Low	Low	Low	Low	Low	Minor	

DevTracker Link to Business Case:	https://devtracker.dfid.gov.uk/projects/GB-1-202960/documents
DevTracker Link to Log frame:	https://devtracker.dfid.gov.uk/projects/GB-1-202960/documents

A. Summary and Overview

Description of programme

Macroeconomic stability is critical for economic growth. Low income countries (LICs) are particularly vulnerable to shocks that cause periods of macroeconomic instability and low growth. Following the financial crisis of 2007/08, and more recently, the collapse in many commodity prices, many LICs have experienced acute macroeconomic pressures. However, for researchers, the macroeconomic crises in developed countries have taken precedence over analysing and advising on macroeconomic problems that primarily affect LICs. Capacity to do macroeconomic research on LICs is relatively small, as is the capacity within LICs to use the evidence for better policymaking.

Macroeconomic Research in Low Income Countries (MRLIC) is a strategic partnership between DFID and the International Monetary Fund (IMF) which seeks to address these issues. DFID is providing £14.7m over 8 years to the IMF to undertake and utilise research into critical macroeconomic issues affecting LICs. The aim of MRLIC is "Better macroeconomic policy-making in LICs leads to faster economic growth, job creation and poverty reduction in LICs". This is delivered through 4 core activities:

- Producing high quality, policy relevant research on macroeconomic issues affecting LICs;
- Ensuring these research products are used by IMF country teams and partner authorities;
- Strengthening engagement by senior IMF policymakers on issues affecting LICs: and
- Expanding the network of researchers and policy makers working on LIC macroeconomics

MRLIC's research focuses on 5 core areas:

- Modelling and understanding policy choices e.g. monetary, exchange rate, fiscal, structural policies
- Understanding macro-financial linkages: e.g. capital flows, financial deepening and inclusion, macro-prudential policies, and transmission of macro-financial shocks
- Promoting structural change and institutional development : e.g. public investment, growth and debt sustainability, macroeconomic management of natural resource wealth, growth through diversification, structural reforms
- Enhancing inclusion: e.g. income inequality, macroeconomic policy and income distribution, gender and macroeconomics
- Building resilience: to e.g. natural disasters, climate change, migration, and conflict

Research is used to generate policy change through active engagement on IMF country missions, training for country authorities, and engagement with the IMF Board and academic economists.

The programme began in March 2012 and was extended for a further two years, to March 2017, by a MoU amendment in December 2014. A third phase was approved in July 2016, extending the programme by 3

years to March 2020 with a budget of £5.13million. In the third phase, DFID's annual funding to MRLIC was cut by 37% (from £2.7m in Phase 2, to £1.71m in Phase 3).

Summary supporting narrative for the overall score in this review

MRLIC's performance over the past 12 months is scored A++ (Outputs substantially exceeded expectation) in this annual review. This score continues the exceptional performance recorded in previous years. MRLIC has managed to maintain the level of outputs it achieved last year, and in several areas has actually increased the volume of outputs being delivered. As measured against expectations in the logframe, performance is exceptional, with MRLIC exceeding the "High" targets set at the beginning of the year for all but one of its output indicators. This performance has been delivered despite both the substantial cut in DFID funding for phase 3, and all logframe targets being increased during 2017. Moreover, the quality of outputs is uniformly impressive. The IMF's Deputy Managing Director noted "The DFID-IMF collaboration has been successful in strengthening the IMF's capacity to assist our member countries".

The total volume of working papers and published papers has been maintained this year. Journal publications are of impressive quality, particularly a publication in the American Economic Review, one of the world's foremost peer-reviewed economics journals. Research coverage has expanded into areas in which the IMF has not traditionally engaged, including climate change, inequality and gender. MRLIC has also published two innovative notes, on "how to" operationalise inequality and gender issues in IMF country work. Feedback from other IMF departments praised MRLIC's work as catalytic in generating greater IMF engagement on these issues.

Use of MRLIC research by IMF country teams and by country authorities has almost doubled this year. Models developed by MRLIC have been used in IMF analysis and/or policy advice in at least 13 LICs this year, and also in the IMF's flagship World Economic Outlook publication. This is despite the reduced availability of DFID funding for MRLIC staff to take part in IMF country missions – there is now enough demand within the IMF for MRLIC support that IMF teams are now funding the majority of this mission work directly. Among country authorities, there has been strong demand for training and support, particularly on MRLIC's Forecasting and Policy Analysis System (FPAS) monetary policy model. Success in this output demonstrates the high visibility of the programme with relevant IMF teams and governments, and the quality and relevance of output.

MRLIC has continued to present at a large number of conferences and events attended by senior IMF staff. Highlights this year have included presentations to the IMF Annual Meetings, and a ground-breaking conference on gender equality, jointly organised with UN Women and the Government of Rwanda, which was attended by representatives from more than 20 LICs. The number of MRLIC papers reaching the IMF Board doubled this year to 5, with papers on anti-corruption, gender, climate change, inequality and macroeconomic trends in LICs being discussed. MRLIC almost doubled its attendance at external conferences this year, and papers commissioned from external academics were above expectation.

Recommendations for the year ahead

- One of the keys to successful uptake of MRLIC research by the IMF and country authorities has been MRLIC staff directly taking part in IMF country missions. This year, the programme has coped successfully with the reduction in DFID funding, by sourcing funds to take part in IMF country missions directly from IMF country teams. DFID welcomes the change in model, and it demonstrates the reputation the MRLIC team has built. However, it does introduce some risks, as MRLIC no longer have a fixed pool of resources to ensure policy uptake of their work in this way. DFID and MRLIC should continue to monitor how this change in model is working, and manage any issues that might arise.
- Working links with leading academics and publications in high-quality professional journals are important to the visibility and reputation of the programme. MRLIC continues to work with external researchers (though dedicating less funding for visiting researchers to the IMF). Some issues have been experienced with the quality of output on papers commissioned from external academics, when these are not drafted with MRLIC team members. DFID and MRLIC should consider the best model for engagement with external researchers in future.

- The programme could make multiple improvements to its monitoring system at low cost. This includes tracking views and downloads of papers and dissemination products, and gathering feedback on training courses. Detailed recommendations are made below.
- A formal steering committee is not required for management purposes. DFID and MRLIC programme staff engage regularly on programme management and direction, both via bi-annual meetings, and informally. In addition, MRLIC workplans are signed off by senior members of the IMF research department. Existing arrangements function well and need not be altered. However, a panel containing senior academics and policymakers in this area might add a helpful layer of oversight to the strategic direction of the programme. This should be considered by DFID and IMF.

B: DETAILED OUTPUT SCORING

Note on scoring: the scores are based on the targets set during the 2017 logframe revision. DFID scores outputs on a range from C to A++, with C being the lowest and A++ the highest. On this programme, scores are related to indicator targets as follows:

Target reached	Score
<l< th=""><th>С</th></l<>	С
L	В
М	Α
Н	A+
>H	A++

Section C provides more details on the definitions of the targets in the logframe.

Output Title	High quality, policy relevant research on macroeconomic issues affecting LICs produced.			
Output number per LF 1		1	Output Score	A++
Impact weighting (%): 30%		30%	Impact weighting % revised since last AR?	N

Indicator(s)	Milestone(s) for this review	Progress
1.1 Number of priority research papers produced, on the following research topics:	By March 2018:	A++
 Monetary and exchange rate policies; Public investment, growth, and debt sustainability; Macroeconomic management of natural resources; Macroeconomic policies and income distribution; Financial deepening for macroeconomic stability and sustained growth; Growth through diversification; Gender and macroeconomics. 	H (90 papers) M (86 papers) L (82 papers)	94 cumulative (108% of high target) 19 produced in 2017/18
8) Capital flows. 1.2 Number of research papers accepted for publication in appropriate high-quality peer-reviewed journals	By March 2018:	A++
appropriate high-quality peer-reviewed journals	H (44 paper) M (42 papers) L (40 papers)	48 published in total. (104% of high target) 11 published in
		2017/18
1.3 Number of freely available books	By March 2018:	Α
	H (2 books) M (2 books) L (2 books)	No book published in 2017/18 2 published in total (100% of target)

This output is scored A++. MRLIC substantially exceeding two targets, and meeting the third. This repeats the score of A++ awarded to this output last year. It is even more notable given that all logframe targets were raised at the beginning of this year.

1.1 Working Papers

MRLIC researchers completed 19 working papers this year, bringing the total to 94 over the life of the programme to date. This exceeds the high target for this year of 90. This achievement demonstrates the

enthusiasm and effort that the team is continuing to put into research production. The working papers cover the five core areas noted in Section A above. Working papers this year are:

- Choi, S. et al. (2017), Oil Prices and Inflation Dynamics: Evidence from Advanced and Developing Economies, IMF Working Paper 17/196
- Choi, S., Furceri, D., and Tovar Jalles, J. (2017), <u>Fiscal Stabilization and Growth: Evidence from Industry-level Data for Advanced and Developing Economies</u>, IMF Working Paper 17/198
- An, Z, Ghazi, T., and Gonzalez Prieto, N. (2017), <u>Growth and Jobs in Developing Economies:</u>
 <u>Trends and Cycles</u>, IMF Working Paper 17/257
- Eicher, T. et al. (2018), Forecasts in Times of Crises, IMF Working Paper 18/48
- Agrawal, I., Duttagupta, R., and Presbitero, A. (2017), <u>International Commodity Prices and Domestic Bank Lending in Developing Countries</u>, IMF Working Paper 17/279
- Marto, R., Papageorgiou, C., and Klyuev, V. (2017), <u>Building Resilience to Natural Disasters: An Application to Small Developing States</u>, IMF Working Paper 17/223
- Cohen, G. et al. (2017), <u>Emissions and Growth: Trends and Cycles in a Globalized World</u>, IMF Working Paper 17/191
- Henn, C. et al. (2017), <u>Export Quality in Advanced and Developing Economies: Evidence from a New Data Set</u>, Policy Research Working Paper 8196, World Bank
- Gurara, D. et al. (2017), <u>Trends and Challenges in Infrastructure Investment in Low-Income</u>
 <u>Developing Countries</u>, IMF Policy Paper 17/233
- Atolia, M. et al. (2017), <u>Investing in Public Infrastructure: Roads or Schools?</u>, IMF Working Paper 17/105
- Amendolagine, V. et al. (2017), <u>FDI, Global Value Chains, and Local Sourcing in Developing Countries</u>, IMF Working Paper 17/284
- Melina, G. and Portillo, R. A. (2018), <u>Economic Fluctuations in Sub-Saharan Africa</u>, IMF Working Paper 18/40
- Lang, V. F. and Tavares, M. M. (2018), <u>The Distribution of Gains from Globalization</u>, IMF Working Paper 18/54
- Furceri, D. and Li, B. G. (2017), <u>The Macroeconomic (and Distributional) Effects of Public Investment in Developing Economies</u>, IMF Working Paper 17/217
- Furceri, D. et al. (2018), <u>The Distributional Effects of Government Spending Shocks in Developing Economies</u>, IMF Working Paper 18/57
- Iyer, T. (2017), <u>Exchange Rate Choices with Inflexible Markets and Costly Price Adjustments</u>, IMF Working Paper 17/154
- Stuart, E., Samman, E., and Hunt, A. (2018), <u>Informal is the new normal: Improving the lives of workers at risk of being left behind</u>, ODI Working paper
- Jedwab, R., Loungani, P., and Yezer, A. (2017), <u>Modern Urban Technology and the Future of the New Urban Giants</u>, mimeo
- Atolia, M. et al. (2017), <u>Premature Deindustrialization</u>, <u>Structural Transformation</u>, <u>and Economic Development</u>: <u>Review and Policy Analysis</u>, mimeo

1.2 Peer-Reviewed Papers

This year MRLIC published 9 papers in peer-reviewed journals, plus 2 chapters in books following a similar peer-review process (11 in total for 2017/18) This brings the total to 48 over the life of the programme to date. This exceeds the high target of 44. All papers were published in high-quality and well-known peer-reviewed academic journals, such as the *Journal of Development Economics* and *Economica*. A notable achievement is the publication of one paper in the *American Economic Review (AER)*, one of the top ten academic journals in economics. This underlines the high-quality of the research conducted, as competition for publication in journals such as the AER is substantial, and the acceptance rate at the AER

is around 8% (<u>Card and Della Vigna, 2013</u>). Research papers accepted for publication in appropriate high-quality peer-reviewed journals were:

- Furceri D., Ge J., Loungani P. (2017) <u>Financial Liberalization</u>, <u>Inequality and Inclusion in Low-Income Countries</u>. In: Bökemeier B., Greiner A. (eds) Inequality and Finance in *Macrodynamics*. *Dynamic Modeling and Econometrics in Economics and Finance*, vol 23. Springer, Cham
- Shimeles, A., Zerfu Gurara, D. and Woldeyes, F. (2017) <u>Taxman's Dilemma: Coercion or Persuasion? Evidence from a Randomized Field Experiment in Ethiopia</u>, *American Economic Review*, vol.107(5), pp. 420-24 (open access)
- Buffie, E., & Zanna, L. (2017). <u>LIMITED ASSET MARKET PARTICIPATION AND DETERMINACY IN THE OPEN ECONOMY</u>. *Macroeconomic Dynamics*, pp. 1-41.
- Buffie, E., & Zanna, L. (2018), <u>Inflation targeting and exchange rate management in less</u> developed countries, *Journal of International Money and Finance*, vol. 81, pp. 159-181
- Furceri, D., Loungani, P. and Zdzienicka, A. (2018), <u>The effects of monetary policy shocks on inequality</u>, *Journal of International Money and Finance*, vol. 85, pp. 168-186
- Furceri, D. and Loungani, P. (2018), <u>The distributional effects of capital account liberalization</u>, Journal of Development Economics, vol. 130, pp. 127-144
- Choi, S. et al., (2018). Oil prices and inflation dynamics: Evidence from advanced and developing economies, *Journal of International Money and Finance*, vol. 82(C), pages 71-96.
- Lowe, M., Papageorgiou, C., and Perez-Sebastian, F. (2018), <u>The Public and Private MPK</u>, *Economica*, forthcoming
- Eicher, T. et al. (2018), <u>Forecasts in Times of Crises</u>, *International Journal of Forecasting*, forthcoming

1.3 Book Publications

No books were published this year. However, the programme has already published two freely available books, so is already meeting expectations for this stage in the programme. A book on conflict and fragile states is being prepared for publication in the near future.

Two book chapters were published this year. These do not count as a separate output for the programme logframe, but are included in 1.2, as they are important towards the programme objectives:

- Melina, G. and Portillo, R. (2018), Economic Fluctuations in Sub-Saharan Africa, in Berg, A. and Portillo, R. (eds), Monetary Policy in Sub-Saharan Africa, Oxford University Press, Oxford
- Duttagupta, R. et al. Globalisation and Inclusive Growth: Can They Go Hand in Hand in Developing Countries?, XXIX Villa Mondragone International Economic Seminar proceeding, forthcoming.

Lessons identified this year, and recommendations for the year ahead linked to this output

• Recommendation 1: In order to manage the reduction in budget this year, the MRLIC programme has made strategic choices to maintain numbers of junior or mid-ranking researchers (assistants and associates), while cutting funds for hiring visiting senior researchers. This has been important in sustaining the level of research output this year. However, hosting visiting senior researchers has been a priority in previous years, to build the programme reputation and a network of relationships. The MRLIC team is confident that this objective has now been achieved, so that this should not be considered a priority anymore. The review team recommends still allocating some resources for hosting external researchers, and maintaining close collaborations with key experts. This supports the quality of the research produced and would also contribute to maintaining a high profile for the programme.

In particular, the review team noted MRLIC's success in getting published in academic journals, which is supported by inputs from senior and external researchers. This demonstrates the quality of the research conducted and the programme's outputs. These publications will continue to enhance the profile of LIC-specific macroeconomic and monetary issues in broader academic and policy circles. They also increase the visibility and the reputation of the programme among key

experts in the field, and provide the team credibility and authority in discussions with policy making staff in the IMF and in country governments.

- Recommendation 2: Last year's Annual Review recommended that the team should produce policy briefs on completed papers. The programme team has opted to generate longer "How-to" notes, and to produce policy briefs and synthesis papers towards the end of the programme, to include as much of the research as possible. These are short papers that illustrate new IMF policies, explore options for reform, or review existing IMF policies and operations, on the basis of MRLIC evidence. Two were published on the IMF website in June 2018, covering gender issues and income inequality. Other notes based on MRLIC research will be produced in the future. MRLIC should continue to publish policy briefs and how-to notes. These offer a great opportunity for further dissemination of the results, particularly among policy-makers using various channels of communication.
- Recommendation 3: MRLIC has been successful in identifying paper topics that are relevant for both the academic and policy community. This is achieved through close contacts with IMF mission teams, and with a good understanding of the main issues faced by LICs. Going forward, the MRLIC team should keep a record of the decision process on the topics for research and publications. This will facilitate an eventual hand-over process, increase transparency, and build useful knowhow for researchers. The role of a steering committee in any such decisions should also be discussed at the next bi-annual DFID-IMF management meeting.
- Recommendation 4: Where possible MRLIC should monitor views, downloads and citations for
 papers that are publicly available. This could be done through a direct monitoring of access and
 downloads of the papers from the IMF website, and also through the use of online tools. This would
 help to quantify the impact and visibility of MRLIC papers, and could support assessment of the
 value-for-money of the programme. Monitoring should be in place by end December 2018.

Output Title	IMF research products (policy analysis, practical and operational tools and frameworks) produced under this project used by IMF country teams and partner authorities.			
Output number per LF 2		2	Output Score	A++
Impact weighting (%):		30%	Impact weighting % revised since last AR?	N

Indicator(s)	Milestone(s) for this review	Progress
2.1 Application and use	By March 2018, evidence of	A++
of tools and frameworks	number of country teams applying	
by country teams.	policy tools and frameworks:	21 applications in 2017/18
	H (77)	
	M (73)	Cumulatively 85 (110% of the high
	L (70)	target)
2.2 Application and use	By March 2018, evidence of	A++
of tools and frameworks	number of country authorities	
by country authorities.	applying policy tools and	13 applications in 2017/18
	frameworks:	
	H (19)	Cumulatively 29 (153% of the high
	M (18)	target)
	L (17)	
2.2.1.Courses offered	By March 2018, evidence of	A++
to country authorities	courses offered to country	
	authorities:	9 courses in 2017/18
	H (3)	
	M (2)	Cumulatively 9 (300% of the high
	L (1)	target)

This output is scored A++. MRLIC is substantially exceeding all targets. Uptake as measured by the logframe has almost doubled over the past year. The research produced through the programme continues to gain attention and increasing uptake by IMF country teams and by government authorities, and is making a strong contribution toward achieving the intended program outcome of *improved policy-making in specific project thematic areas*. Of particular note this year is the increasing demand and policymakers' attention to inequality and gender. The research and tools produced through the programme have facilitated discussion on this topic within the IMF. The MRLIC team has also managed to deal with rapidly rising demand in a pro-active way.

2.1 Applications by IMF country teams

This year IMF Country Teams have applied MRLIC's work in 21 different contexts, covering four broad topics: 1) Monetary and Exchange Rate Policies, 2) Public investment, and debt sustainability, 3) Growth through Diversification, 4) Income and Gender Inequality. Many of these were through support to the development of a targeted Forecasting and Policy Analysis System model, Article IV missions, and Selected Issues Papers.

Research on *growth through diversification* was applied to the Sub-Saharan Africa region, Guinea-Bissau, and Vanuatu. This work involved applying MRLIC's "diversification toolkit" to evaluate the challenges and the issues related to diversifying economies, and the structural reforms and policies necessary to achieve this.

Research on *Public Investment and debt sustainability* was applied to the Solomon Islands, Madagascar, the Democratic Republic of Timor-Leste, Lesotho, and Maldives. In particular, the dynamic LIC-specific macroeconomic Debt-Investment-Growth (DIG) model was used to illustrate and estimate the predicted outcomes of public investments plans. The DIG model, along with MRLIC's Natural Resources (DIGNAR) model, was used to design a fiscal consolidation strategy for Lesotho. In addition, the DIG model was applied in the <u>World Economic Outlook (October 2017)</u> to simulate how policies can help moderate the consequences of weather shocks in LICs.

There were six examples of applying MRLIC research on *Income and gender inequality*, demonstrating how the topic has gained momentum this year. A publicly available toolkit based on income inequality research was released, to assist analysts in investigating the implications of fiscal policies on both macro aggregates and distributional issues. This was applied to Benin, examining the distributional impact of fiscal consolidation, and Dominica, analysing the impact of revenue mobilisation. Also, an application to Myanmar analysed the potential impact on income inequality of the financial sector reform. Research on *gender inequality* has led to the development of a gender budgeting policy toolkit i.e. an approach that uses fiscal policy to promote gender equality. This has been applied through various initiatives, and consultations in Nigeria, Sri Lanka, and Rwanda.

2.2 Applications by Country Authorities

Previous MRLIC research on *monetary and exchange rate policies* led to the development of the Forecasting and Policy Analysis System (FPAS) model, which supports LIC central banks in setting monetary policy. Bilateral sessions were run to support IMF country teams, local authority officials and central bankers in Tanzania, Mozambique, Uganda, Kenya, Ghana and Rwanda to develop their own targeted FPAS model. MRLIC experts also participated in, and helped facilitate, the annual meeting of the East African Community's (EAC) Technical Working Group on FPAS in December 2017. This group aims to share knowledge and harmonise FPAS models among the EAC Partner States' central banks. The ongoing relationship with the EAC Monetary Affairs Committee underlines the relevance of MRLIC's research outputs for this group of LICs.

2.3. Courses offered to Country Authorities

The MRLIC team co-organised a Peer Learning Conference on Gender Equality in Kigali (Rwanda) in November 2017. Other organisers were Rwanda's Ministry of Gender and Family Promotion, UN Women Rwanda, and the Uogonzi Institute. This was initially planned as a small event, but quickly grew in participation: 150 representatives attended from 22 sub-Saharan African nations. The conference included field trips to relevant ministries and field projects, and a dinner with Ministers from various countries. The event created great enthusiasm and awareness on the topic, and there were multiple follow-up requests for similar events from country authorities on specific topics.

Other projects with country authorities included: i) support to the Bank of Uganda modelling team to develop their projection model, ii) application of research to Article IV discussions in Vanuatu, iii) customised training missions to Malawi and Mozambique to modernise their monetary policy frameworks. Nine workshops/courses on toolkits and applications were also held in various countries and settings.

Lessons identified this year, and recommendations for the year ahead linked to this output

- Recommendation 1: In reaction to the lower budget for Phase 3 of the programme, MRLIC has cut funding for country missions by its staff by 50%, and made a strategic decision to replace these funds with direct funding from IMF country teams. This has been a major success, with IMF teams now contributing directly to the programme. This has supported the sharp increase in uptake, lowered DFID burden share, and made the programme more demand-responsive. DFID welcomes this change. However, this is a major change to operating model which affects the key channel through which this programme generates policy uptake. DFID and MRLIC should continue to monitor the effects of this change closely, and address any issues which arise.
- Recommendation 2: In almost all cases where the IMF has used MRLIC models for policy advice, the underlying analysis has been delivered directly by an MRLIC staff member. This is an excellent mechanism for quality control, but also place constraints on the eventual breadth of uptake. MRLIC and DFID should consider the intended long-term plan for this area i.e. the extent to which MRLIC intends to eventually relinquish direct control over use of its tools.
- Recommendation 3: The MRLIC team has flagged that it is happy to share with DFID its
 knowledge and experiences on knowledge sharing, learning within the organisation, and uptake of
 research by country teams. The review team recommends that DFID initiate a dialogue with the
 IMF on this.

•	Recommendation 4: The review team also notes that, following last year's recommendation, there has been an increased offer of trainings and workshops, and facilitation of uptake by country authorities. This has also been facilitated by closer links with the IMF Institute for Capacity Development (ICD), which is part of DFID's strategic partnership with the IMF. ICD's current deputy director is a former MRLIC programme staff member. This link is important to the strong performance this year. The MRLIC team should seek to strengthen this work by tracking feedback from participants in training, and using this to improve future delivery. This information is already gathered by the IMF Institute for Capacity Development, and should be compiled by end December 2018.
	x

Output Title	t Title Engagement by senior IMF policymakers on issues affecting LICs strengthened through this project.			
Output number per LF 3		3	Output Score	A++
Impact weighting (%):		25%	Impact weighting % revised since last AR?	Yes, decreased 5%

Indicator(s)	Milestone(s) for this review	Progress
3.1 High level policy conferences attended by senior IMF staff reflect	By March 2018, number of policy conferences	A++
findings of research papers funded under this project.	drawing on outputs from the project:	8 conferences in 2017/18
	H (26) M (25) L (24)	Cumulatively 30 (115% of the high target)
3.2 Results of the research papers produced reflected in IMF board	By March 2018: H (13)	
discussions.	M (12) L (12)	A++
		5 pieces in 2017/18
		Cumulatively 16 (127% of high target)
3.3 Results of the research papers produced reflected in IMF policy	By March 2018: H (23)	
papers such as Staff Discussion Notes, policy memos to management, and the like	M (22) L (21)	A++
management, and the inc		5 pieces in 2017/18
		Cumulatively 24 (104% of high target)

This output is scored A++. MRLIC substantially exceeded two targets, and somewhat exceeded the third.

3.1 High level policy conferences

Research produced within the programme was presented and discussed at eight high-level conferences, with the involvement of senior IMF staff, reaching an overall total of 30. This exceeds the high target of 26. Two conferences focused on gender budgeting and gender inequality: 1) World Government Summit Session on Gender Budgeting, co-organised with the UAE Gender Balance Council, and 2) Gender Equality: From Theory to Practice Conference, co-organised with Rwanda's Ministry of Gender and Family Promotion.

Other high-level conferences during the year focused on financial inclusion, capital flows, forecasting issues, inclusive growth, and future challenges for LICs. Research outcomes on monetary policy and credit dynamics in LICs, and on gender budgeting were presented at the conference "Towards 2030: Trends, Opportunities, Challenges, and Policies for Inclusive Growth". The event was part of the IMF Annual Meeting 2017, and was attended by senior IMF staff, including IMF Deputy Managing Director Tao Zhang. It included keynote speeches from leading economists Dani Rodrik and Ricardo Hausmann.

A one day conference on 'Financial Inclusion: Drivers and Real Effects' at the IMF Headquarters brought together scholars to discuss research on different aspects of financial inclusion. A policy panel chaired by Rachel Glennerster, DFID Chief Economist, discussed the possible trade-offs between financial inclusion and stability, with the participation of Asli Demirguc-Kunt, World Bank Director of Research; Patrick

Njoroge, Governor of the Central Bank of Kenya; Rohini Pande, Professor of Public Policy; and Ratna Sahay, Deputy Director of the IMF. Maurice Obstfeld, Director of the IMF Research Department, offered opening remarks at the conference.

3.2 Results of the research papers produced reflected in IMF board discussions

Results of MRLIC research were utilised in five IMF Board Papers this year. These covered anti-corruption, gender, climate change, inequality and macroeconomic trends. The MRLIC team have remained proactive in seeking opportunities to engage senior policymakers in the IMF and elsewhere on macroeconomic issues affecting LICs. IMF senior management are aware of the programme and supportive of its work. Positive feedback has been received the IMF Managing Director (Christine Lagarde), Deputy Managing Director (Tao Zhang), and Director of the Research Department (Maurice Obstfeld).

3.3 Results of the research papers produced reflected in IMF policy papers

MRLIC research, or analysis generated from MRLIC models, featured in five other IMF Policy Papers this year. These included the Fiscal Monitor, the World Economic Outlook, the Africa Regional Economic Outlook, and the Asia-Pacific Regional Economic Outlook. Also, the IMF Board Meeting on Emerging Issues in November featured the presentation of the two pilots (Malawi and Ethiopia) as good practice of analytical work impacting government policy and collaboration between global institutions. The meeting was chaired by Christine Lagarde, IMF Managing Director.

Lessons identified this year, and recommendations for the year ahead linked to this output

 Recommendation 1: DFID should evaluate the possibility of DFID representatives attending the IMF bi-annual meetings where seminars showcasing the research are hosted. The review team also suggests actively looking for opportunities to present MRLIC research to DFID senior staff (e.g. by taking advantage of MRLIC staff travel schedules to bring them to DFID offices in UK and elsewhere).

Output Title		IMF strengthens research capacity, by expanding the network of researchers and policy makers working on LIC macroeconomics				
Output number per LF 4 Output Score A+				A+		
Impact weighting	ng (%):	15%	Impact weighting % revised since last AR?	Yes, increased 5%		

Indicator(s)	Milestone(s) for this review	Progress
4.1 Number of commissioned research papers from new researchers* (see definition below) produced on thematic areas.	By March 2018, number of commissioned research papers produced: H(24) M(23) L (22)	A++ 5 produced in 2017/18
4.1.1 A data toolkit is a new dataset that is put in a format that is accessible and applicable to the work of IMF country teams and country authorities.	By March 2018, number of produced: H (6) M (6) L (5)	Cumulatively 25 (104% of high target) A 1 toolkits produced in 2017/18, 1 updated Cumulatively 6 (equal to the high target)
4.2 Attendance of external researchers and policy makers at high-level policy conferences.	By March 2018, number of high- level policy conferences attended by external researchers: H (61) M (58) L (56)	A++ 35 presentations at conferences in 2017/18 Cumulatively 86 (141% of high target)
4.3 Project Outputs disseminated in e-newsletter and up-dated public webpage and R4D (DFID webportal). Number of updates of e-newsletter and/or webpage:	By March 2018, number of updates: H (22) M (21) L (20)	A+ 4 updates in 2017/18 Cumulatively 22 (equal to the high target)

This output is scored A+. MRLIC is substantially exceeding two targets, somewhat exceeding one target, and meeting one target.

- *4.1 Number of commissioned research papers from new researchers*The team have commissioned five research papers on the thematic areas this year:
 - Iyer, T. (2017), Exchange Rate Choices with Inflexible Markets and Costly Price Adjustments, IMF Working Paper 17/154

- Stuart, E., Samman, E., and Hunt, A. (2017), <u>Informal is the new normal: Improving the lives of</u> workers at risk of being left behind, ODI Working Paper 530
- Eicher, T. et al. (2018), Forecasts in Times of Crises, IMF Working Papers 18/48
- Jedwab, R., Loungani, P. and Yezer, A. (2017), <u>Modern Urban Technology and the Future of the</u> New Urban Giants, mimeo
- Atolia, M. et al. (2017), <u>Premature Deindustrialization</u>, <u>Structural Transformation</u>, <u>and Economic Development</u>: <u>Review and Policy Analysis</u>, <u>mimeo</u>

The cumulative number of commissioned papers exceeded the high target of 24, resulting in a score of A++ for this output. The MRLIC programme team noted that commissioned papers often do not end up focusing on the intended research topics as directly as do papers completed by IMF staff (either one their own, or in conjunction with external academics). This is partly due to differing interests and incentives between IMF staff and external researchers.

4.1.1 New Data toolkits produced

The programme released two toolkits this year: the inequality toolkit and an updated version of the diversification toolkit. Both are publicly available. This is a success for the project, since it allows greater practical access to the research produced. The inequality toolkit is specifically targeted at LICs, and can be used to investigate the implications of fiscal policies on macro and inequality indicators. The toolkit was applied for the 2017 Article IV Consultation for Benin. The team is closely involved in the applications of these toolkits to avoid quality issues.

The updated version of the diversification toolkit is a valuable piece of work, which DFID welcomes. However, it is discounted in setting the score for this indicator. Logframe indicators are cumulative, so the original version of this toolkit has already been counted against this indicator.

4.2 Attendance of external researchers and policy makers at high-level policy conferences.

The team made 35 presentations at high level policy conferences during the year, of which four were at the single conference at the Centre for the Study of African Economies (CSAE) at Oxford University, consolidating a strong presence from last year conference.

4.3 Project Outputs disseminated

Further dissemination of the research was achieved through:

- IMF newsletters and magazines, such as Finance & Development and the IMF Research Bulletin
- blogs, such as a blog on infrastructure on the IMF Blog and the IMF intranet,
- presentations and TED-style talks, such as the IMF Analytical Corner at the IMF Spring Meetings, and a talk on gender budgeting during the IMF 2018 Spring Meetings
- Media coverage and news articles, with articles featured on *The Wall Street Journal*, *Bloomberg*, *Deutsche Welle*, *Human Rights Watch*, *CNBC videos*, *and others*.
- Articles on specialised websites such as VoXEU.

Lessons identified this year, and recommendations for the year ahead linked to this output

- Recommendation 1: The MRLIC team noted the importance of good working links with external researchers who are prominent in the field of macroeconomics of LICs. Working with leading non-IMF researchers acts as a marker of quality, a source of new ideas, and an important channel of outreach. However, the MRLIC team also noted difficulties in ensuring that work commissioned solely from external sources closely aligns with the outputs intended by the MRLIC team. External researchers may have different understandings, interests or incentives to IMF staff. Obtaining high quality research through commissions often requires a very close relationship with the IMF. This issue has also impacted on the number of papers this year. The review team suggests a reassessment of the commissioning process, to better assess how and when these papers are commissioned, and the correct target for this logframe indicator. This should be completed by December 2018.
- Recommendation 2: The review team recommends that MRLIC should, where possible, track indicators for its dissemination products (i.e. views and downloads of newsletters, blogs and

videos) by end December 2 0 and their potential impact.	018 . This will p	rovide an indication	of the reach these $ $	oroducts have
		xv		

C: THEORY OF CHANGE AND PROGRESS TOWARDS OUTCOMES

Summarise the programme's theory of change and any major changes in the past year

This program was initiated in 2012. The Business Case for the program does not specify a formal Theory of Change (ToC). The implicit ToC for the program is summarised in its logical framework:

OUTPUT 1	High quality, policy relevant research on macroeconomic issues affecting LICs produced.	
OUTPUT 2	IMF research products (policy analysis, practical and operational tools and frameworks) produced	
	under this project used by IMF country teams and partner authorities.	
OUTPUT 3	Engagement by senior IMF policymakers on issues affecting LICs strengthened through this project.	
OUTPUT 4	IMF strengthens research capacity, by expanding the network of researchers and policy makers	
	working on LIC macroeconomics	



Better engagement by IMF policy-makers on LIC-specific macroeconomic issues, leading to	
improved policy-making in specific project thematic areas.	



IMPACT	Better macroeconomic policymaking in LICs leading to faster economic growth, job creation an	
	poverty reduction.	

The ToC for this programme remains valid, and there have been no major changes over the past year. A decision was taken to partner directly with the IMF in order to maximise the early engagement of potential users of the research, and ensure that the research agenda was shaped by demand for policy advice. The IMF have unique advantages in these areas and the programme's management arrangements, linking the IMF Research Department and the Strategy, Policy and Review Department, helps ensure that the research agenda remains relevant to the Fund's policy activities. The validity of the ToC is confirmed by the continuing high performance of the program. DFID and MRLIC will set out a more detailed ToC by end **October 2018**.

Describe where the programme is on track to contribute to the expected outcomes and impact, and where it is off track and so what action is planned as a result in the year ahead

The program is on track to contribute to the desired outcome and impact. The program demonstrates substantial success in engaging IMF staff on LIC issues, and can make strong claims about improving macroeconomic policy in LICs. The MRLIC team has put substantial time into generating products which translate their research output into tools for practical policy analysis. These include models, data toolkits and "how to" notes. The benefits of this effort are clear in measures of policy uptake. As noted under output 2, direct uptake by IMF country teams and by country authorities has more than doubled this year. MRLIC models and analyses have been used directly in a number of IMF Article IV country reports this year. feeding directly into IMF policy recommendations to member states. A substantial number of country authorities have been trained on the use of MRLIC models. A success of particular note is the Forecasting and Policy Analysis System (FPAS) model, for use by central banks, which is now being adopted in a coordinated fashion by member states of the East African Community. The numbers of papers presented to the IMF Board has also doubled this year. Papers have covered topics including inequality, gender, corruption and macro-economic trends. The IMF's Deputy Managing Director noted that "The DFID-IMF collaboration has been successful in strengthening the IMF's capacity to assist our member countries". Individual IMF staff have noted to DFID that MRLIC output has been catalytic in improving IMF engagement on these topics.

As part of the drafting of the new ToC, it would be helpful for DFID and MRLIC to reflect together on the channels which have been more and less effective in generating policy impact.

Explain major changes to the logframe in the past year

The level of logframe targets was reset at the beginning of Phase 3. First, targets were adjusted upwards to take account of the fact that the program has over-delivered in each of its first five years. To do this, average performance over the first five years of the program was calculated for each target. Second, this average performance was adjusted downwards pro-rata to account for the cut in budget. The resulting numbers were then set as the "medium" targets for the program, equivalent to a DFID score of "A" or "expectations met".

The "medium" targets were then used as a baseline to set "high" and "low" targets for Phase 3 delivery. "High" targets were set equal to the average level of delivery of years 1-5 of the program i.e. high performance was defined as delivery equal to the level achieved in the first 5 years of the program, when budgets were higher. "Low" targets were then set as an equal distance below "medium" e.g. if Medium was 10, and high was 13, then low was set at 10 - (13-10) = 7.

Finally, some new targets were added to the logframe, reflecting the importance of certain workstreams under phase 3. These were:

- 1.3: Number of freely available books
- 2.2.1: Courses offered to country authorities
- 4.4.1: Number of data toolkits (A data toolkit is a new dataset that is put in a format that is accessible and applicable to the work of IMF country teams and country authorities).

Describe any planned changes to the logframe as a result of this review

Targets under output 2 ("IMF research products produced under this project used by IMF country teams and partner authorities") should be reset in line with performance observed this year. The move to a new model of funding for country missions has sharply increased engagement with IMF policy teams. Figures for outputs 2.2 and 2.2.1 have already exceeded targets for 2019. As such, it is appropriate for DFID and IMF to reset expectations on this output, and increase targets for 2019 and 2020.

Changes to other targets are not required at this time. While the program has over-performed on most indicators this year, it has also had the benefit of momentum and resources built over Phase 2, when budgets were higher. The effects may fall away this year, potentially leaving a tighter resource envelope for generating publications, and engaging with the IMF Board and external researchers. There remain significant gaps to reach 2019 targets on indicators under outputs 1, 3 and 4, and effort will be needed to reach them.

Relating to outputs 1 and 4, it is recommended that IMF and DFID produce figures related to number of views, downloads and citations of MRLIC papers and dissemination products by end **December 2018**. This will serve as a reasonable proxy of the level of impact that different products are attaining. Once produced, DFID should consider whether figures of this sort could be added as a new target to the logframe, or could replace an existing target.

D: VALUE FOR MONEY

Assess VfM compared to the proposition in the Business Case, based on the past year

The programme is achieving a unit cost of just over \$87,000 for working papers, substantially lower than planned in the Business Case. This indicates excellent VfM performance. The Business Case (BC) envisaged a unit cost per research paper of \$193,600 for the IMF programme and \$288,000 for the next best option. The BC notes that a number of these papers will be published - and so it is principally discussing working papers. The BC also stressed that the IMF would achieve value for money through procurement, by following all IMF guidelines and, where possible, competitive tendering. These procedures have been followed.

The table below shows cost per paper over the six years of the project. Total staff, contractual and visiting scholar costs are split between generating papers and undertaking country applications / missions. The MRLIC team estimate that staff and visiting scholars spend 75 percent of their time on research papers, while the remaining 25 percent is devoted to country applications work. On this basis, the cost per working paper is approximately \$87,000 (£66,000), and the cost per published paper is approximately \$170,000 (£130,000). Both these costs compare favourably with the DFID benchmark of \$193,600 / £150,000 per paper. There is a decrease in per paper costs from last year.

Cost per Working and Published Paper

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Total Staff/Contractual/VS Costs	\$10,916,414	
Research Paper Costs	\$8,187,311	
Country Applications Costs	\$2,729,104	
Working Papers Produced	94	
Cost Per Working Paper	\$87,099	
Published Papers Produced	48	
Cost per Published Paper	\$170,569	

It is important to note that there is a lag involved in getting working papers accepted for publication in peerreviewed journals. Over time, more existing working papers will be submitted to journals and accepted for publication, so that the cost per published paper is expected to decrease further.

Explain whether and why the programme should continue from a VfM perspective, based on its own merits and in the context of the wider portfolio

This programme represents excellent value for money and should continue. It is substantially exceeding expectations, and has much lower unit costs than were planned, and demonstrates excellent uptake among intended audiences in IMF teams and LIC authorities. This project is highly cost effective for several reasons:

- **Economy** Programme management costs are low, at approximately 8% of total spend (1% direct management costs + a standard 7% IMF trust fund management fee). This low proportion of spend on management and administration allows a very high proportion of funds to be available for producing research. The project strictly follows all Fund guidelines for hiring, travel, and conferences. All contractual employees undergo a competitive process before being hired. There is also good use of cost sharing, with other organisations sharing costs of delivery / attendance of conferences. (NB the Trust Fund management fee is charged at a rate set outside the control of the programme managers in DFID or the IMF team).
- **Efficiency** Outputs are produced under firm timeframes and must meet Fund requirements for publication. Quality is excellent, with 48 publications in peer-reviewed journals. This serves

as a marker of quality, and enables the MRLIC team to have authority and influence when engaging with policymakers

• Effectiveness - Moreover, because the MRLIC team is composed primarily of IMF staff, they have a unique ability to communicate research findings quickly to influential IMF country staff to achieve policy impact. This is an extremely valuable resource which cannot be replicated by other delivery structures.

The programme is becoming increasingly sustainable over time, with less burden share on DFID. The initial up-front costs of hiring visiting academics and supporting country mission acted as an investment in building credibility for the programme. The programme is now able to leverage more from the operating model now that it has been tried and tested. In particular, the research uptake budget has been reduced by 50% this year, but IMF departments are now willing to directly subsidise overseas missions. There is also now a good network of academics to draw upon, with fewer visiting researchers needed.

E: RISK

Overview of programme risk (noting the rating from p.1) and mitigation

The overall risk rating for this project remains Minor, with each risk category also rated as minor:

- External context: Most research is carried out at IMF headquarters using secondary datasets, so has limited exposure to context in LICs.
- Delivery: Established delivery systems are in place, and have demonstrated high delivery over an extended period of time. Demand for MRLIC outputs remains high.
- Operational: Experienced management teams are in place at both DFID and IMF.
- Fiduciary: All funds are spent directly by the IMF, and are subject to extensive IMF financial management controls.
- Reputational: Research activities and topics pose little or no reputational risk.
- Innovation: Research activities and topics are not subject to substantial innovation risks.
- Safeguarding: Programme activities rarely, if ever, involve contact with vulnerable persons, and external researchers are managed in accordance with IMF procedures.

While overall risk remains minor, the annual review process has highlighted that the change in delivery model this year has raised some new potential risks. Sourcing funding from other IMF departments, and cutting funds for senior researchers have been strategically successful, but alter the operating model of the programme. As such, DFID and MRLIC team will work together to update the risk matrix for this programme by end **September 2018**. Risk rating is expected to remain minor. In addition, in line with DFID smart rules, the MRLIC programme team should develop a risk register by end **July 2018**.

Update on partnership principles

Partnership principles are not applicable. MRLIC is a global research programme managed by the IMF. No funding is passed to country governments or similar bodies. All funds are held and managed by the IMF and are subject to strict financial controls under IMF policies and in accordance with the rules applied to donor sub-accounts, in this case the United Kingdom Selected Fund Activities (SFA) sub-account. These rules are set at Board level and are not subject to negotiation by the team.

F: DELIVERY, COMMERCIAL & FINANCIAL PERFORMANCE

Performance of partners and DFID, notably on commercial, and financial issues

This year, MRLIC has again exceeded the majority of its "high" output targets. High targets are calibrated to be above DFID expectations for performance, as per the arguments set out in the approved Business Case and Addendums.

Phase 3 of MRLIC started under a lower budget compared to the two previous phases. This has required the team to maintain the high quality of the outputs but with fewer resources. Though this has clearly had an impact on the resources available to staff, they have met or exceeded the "high" targets on almost all outputs. The stresses on the Phase 3 budget were managed in a number of ways;

- The programme shifted attention to use of research assistants (RAs), rather than costly visiting academics, which cut salary costs substantially
- The initial investment in the visiting academics was worthwhile as the programme now has a good network to draw on
- Cost sharing has become an increasing feature, with other IMF departments willing to subsidise travel costs on overseas missions, and conference costs being shared with other organisations
- Efficient use is being made of internal economists

The following table provides a breakdown of spending over six years of the project:

Project Expenditures Years 1-6

Deficitures Tears 1-0		
Activity	Total, Years 1-6	
HQ led missions including entire mission team	\$6,529,504	
Short-term Advisors - CD delivery	\$477,102	
Research HQ based / Visiting Scholars	\$3,909,808	
Seminars & Study Tours	\$1,510,683	
Project Backstopping	\$2,250,403	
Project Management	\$161,009	
Exceptional Expenses	\$146,730	
Trust Fund Fee	\$1,048,967	
Total	\$16,034,206	

As of April 2018, \$16.0 million has been drawn down from the subaccount. These figures reflect a lag of actual expenses of approximately two to three months to enable the requisite verification of expenses before they are charged to donor subaccounts. Throughout this programme the IMF has been extremely accurate and reliable in its cost estimates e.g. salary increases have been incorporated, without more resources being required to complete activities. Any such increases have been predictable, so costs have been straightforward to manage. DFID does not foresee any changes in cost structures due to exchange rates.

The programme has benefited from strong continuity in its management, enabling lessons to be learned over time. The MRLIC programme director has been involved with the project since its inception, serving first as the lead for research on diversification, and now as the division chief of Development Macroeconomics Division of the Research Department. He remains the main point of contact between the IMF and DFID.

Date of last narrative financial report(s)	May 2018
Date of last audited annual statement(s)	31 July 2017

G: MONITORING, EVIDENCE & LEARNING

Monitoring

The program monitors numbers of papers and conference presentations directly through reports by staff. Policy uptake is monitored through engagement of MRLIC staff on IMF country missions (it is almost always the case that when a country mission uses MRLIC models or data toolkits, and MRLIC member joins the mission). Board engagement is monitored through IMF internal management communications. Programme meetings take place monthly to update managers on how individual workstreams are faring, and where delays obstructions may arise. Updates and forward looks on each logframe target are compiled

every four months, and shared with DFID for management purposes. DFID monitors programme progress through bi-annual meetings, and frequent informal contact between the DFID Senior Responsible Owner (SRO) and IMF programme staff.

Program monitoring could be substantially improved by generating statistics on numbers of views, downloads and citations of MRLIC research products, and by tracking feedback on training events. This practice is used on many DFID-funded research programs. Detailed recommendations are in Section B.

Evidence

The fundamental evidence for the need for this programme remains largely unchanged from that set out in the original business case, and formed the foundation for the costed extension approved in June 2016. An evaluation is not applicable.

Learning

The MRLIC team operate monthly meetings to take stock of progress and scope for potential delays and blockages. Discussions on issues faced take place with DFID regularly. Issues are raised via email or phone call as required rather than waiting for a formal meeting cycle. The programme has benefited from strong continuity in its management, enabling lessons to be learned and acted on over time. Neither DFID nor the MRLIC team operate a formal system for logging lessons learned by the programme. The management team and DFID and MRLIC should consider whether developing such a system would add value to programme delivery.

Progress on recommendations from previous reviews

Regarding the Summary of Recommendations presented in the 2017 Annual Review, progress has been made on two of three items:

- The programme logframe was revised at the beginning of Phase 3, with targets raised in line with the performance demonstrated over phases 1 and 2 of the program. This is described in Section C above.
- MRLIC has begun developing evidence products that distil key lessons from the programme so far. "How to" notes have been published for dealing with issues of gender and inequality in IMF work. Two more notes are planned for next 2019. DFID would continue to welcome notes on 'macroeconomic management of natural resources', 'macro policies and income distribution', 'financial deepening for macroeconomic stability and sustained growth', 'Growth through diversification'. The MRLIC team have noted that the slow pace of production is due to a need for rigour in publishing guidance notes that may affect IMF policy advice.
- Progress has not been made on the programme steering committee. DFID and MRLIC programme staff engage regularly on programme management and direction, both via bi-annual meetings, and informally. MRLIC workplans are signed off by senior members of the IMF research department. As such, a formal steering committee is not required for management purposes. However, a panel containing senior academics and policymakers in this area might add a helpful layer of oversight to the strategic direction of the programme. This should be considered by DFID and IMF.

Annual Review Process

This annual review was conducted by a DFID A2 Economic Adviser and B1 Assistant Economist who are independent of the programme, and not involved in its management. They were supported by the programme manager and Senior Responsible Owner. Quality Assurance was provided by the A1 manager of DFID Growth Research Team. The review included a review of DFID and IMF documents, and in depth discussions with the IMF and DFID teams.