

## Annual Review - Summary Sheet

This Summary Sheet captures the headlines on programme performance, agreed actions and learning over the course of the review period. It should be attached to all subsequent reviews to build a complete picture of actions and learning throughout the life of the programme.

<b>Title: Macroeconomic Research in Low Income Countries</b>		
<b>Programme Value: £14,735,986</b>		<b>Review Date: May 2017</b>
<b>Programme Code: 202960</b>	<b>Start Date: March 2012</b>	<b>End Date: March 2020</b>

### Summary of Programme Performance

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

### Summary of progress and lessons learnt since last review

1. "Macroeconomic Research in Low-Income Countries" represents a strategic partnership in research between DFID and the IMF, with the intention of (a) enhancing the generation of high-quality research on key macroeconomic issues in low-income countries (LICs); (b) ensuring research uptake through the design of the research and its execution in close collaboration with policymakers within and outside the IMF; (c) using the IMF's pulling power to expand the network of macroeconomic researchers working on LICs; and (d) achieving this as cost-effectively as possible. The project began in March, 2012 and will conclude in March, 2020, following the approval of a costed extension in July 2016 that approved a 3<sup>rd</sup> Phase to commence in April 2017.
2. The agenda has eight broad topics:
  - i) Monetary and exchange rate policies
  - ii) Public investment, growth, and debt sustainability
  - iii) Macroeconomic management of natural resource wealth
  - iv) Macroeconomic policies and income distribution
  - v) Role of financial deepening in fostering macroeconomic stability and sustained growth
  - vi) Growth through diversification
  - vii) Capital flows
  - viii) Gender and macroeconomics
3. Once again the Macroeconomic Research in LICs project has exceeded the "High" milestones for virtually every indicator. Where it hasn't it has met the high targets, which are calibrated to be slightly above our expectations for performance as per the arguments set out in the approved Business Case and Addendums. The medium targets are calibrated to meet our performance expectations. This mechanical logframe measurement fails to capture the full details of the programmes excellent performance, for example the success at engaging with senior policy makers on policy areas investigated by the programme, such as on gender and macroeconomics and macroeconomic policies and inequality. The programme continues to engage a wide range of LICs, including in DFID focus countries, both in the application of research and in the provision of training to practically use toolkits produced by the programmes research. The project deserves its continued assessment at A++.
4. The project continues to play a strategic role in the IMF. The IMF remains extremely important in LICs, which are under-researched and have special characteristics. This project is part of an effort to keep people, intellectual energy and innovation going around LIC issues, and seems to be working well in this regard. A number of researchers brought in to work on the programme have transitioned into full roles elsewhere in the IMF, while others have moved on to positions in highly ranked universities. This is a good long-term development, as it builds a cadre of people within the Fund who have focused on LIC specific issues and of people in academia they have

working relationships with. The programme has also maintained contact with external academics and continues to increase the number academic collaborators.

5. The project has produced an excellent annual report which is fully annexed to this Annual Review, providing full details of all outputs for the year. The outputs of the research programme have continued to gain traction in a policy context, with 16 applications by IMF country teams and 7 cases of uptake by country authorities in 2016/17. Uptake for the policy toolkits developed by the programme remains strong. The Debt, Investment and Growth (DIG) model, which helps countries assess the implications of different approaches to scaling up public investment for critical infrastructure, is gaining popularity with applications in large countries such as the Kyrgyz Republic and small states, such as the Maldives and Vanuatu. This is proving particularly useful for small states as they promote resilient infrastructure that is able to withstand natural disasters – events that have a disproportionate effect on small states. In response to “lower for longer” commodity prices the diversification toolkit is helping IMF country teams advise governments on how to shift away from reliance on commodity exports. The team have focused a lot of energy in 2016/17 on engagement with central banks in SSA and the East African Community’s Monetary Affairs Committee. They have continued to encourage use of the Forecasting and Policy Analysis System (FPAS)<sup>1</sup>, a small macroeconomic model used extensively to guide central banks in LICs in their monetary policy decisions. This model is proving popular with LIC policymakers and will help many countries deal with difficult economic environments caused by low commodity prices.
6. Through 2016/17 the IMF team have continued to exceed the target for the production of research papers. Particularly noteworthy in 2016/17 is a paper synthesising work on the monetary policy transmission mechanism in LICs – a full understanding of which is vital for monetary policymakers. This overachievement is not coming at the cost of quality, as the team have also exceeded the high target for peer-reviewed publications and increased the number in high quality peer-reviewed journals. As well as this, the team have produced two books this year. These are important products that collect together the results from individual research papers and allow readers to engage with the full depth of evidence the programme has produced. They are not for the casual reader, but for serious consumers in the policy and research community. The programme has also produced more light-touch outputs to reach broader audiences, including blogs, speeches and newsletters. They also received very favourable coverage of the work on gender budgeting in [The Economist](#), which highlighted that the IMF used not to see promoting sexual equality as its job, but that now the IMF Managing Director, Christine Lagarde, wants gender-budgeting to play a role in the advice the IMF gives to member countries and the work of the IMF/DFID programme is very active in supporting this. During 2016/17 Christine Lagarde participated in a number of conferences discussing the work of the IMF/DFID programme on this and other areas.
7. In the last Annual Review we noted that the chief of the Research Department’s Development Macroeconomics division – and lead of the IMF/DFID programme - had moved to a Deputy Director of the IMF’s Institute for Capacity Development (ICD) and we are optimistic about the implications of this for uptake of the programmes research. The optimism was justified. In 2016/17 there was a continued scale up in dissemination of the toolkits produced by the programme and an increase in uptake by country authorities. Results of the programmes research has been reflected in a large number of IMF Board and Policy papers during the past year.

### **Summary of recommendations for the next year**

8. This review marks the end of the programmes second phase and a transition into the 3<sup>rd</sup> Phase, which will focus on some new areas of research, as well as consolidation and dissemination of existing research findings. Progress on the new programme of work is on schedule and a new logframe will be finalised during July 2017. Given the short duration of Phase 2, two years, this transition is the appropriate time to reflect on the programme logframe. We will work with the IMF team to recalibrate expectations based on the accumulation of experience so far. The programme might not continue to substantially exceed expectations following the adjustment to expectations, but this should not be interpreted as a change in performance by the programme.

9. As the programme has now built a catalogue of research output, we encourage the research team to produce summary evidence products that distil key lessons from the programme so far. This was a recommendation last year, but was judged by DFID and the IMF to be low priority during 2016/17 as opportunities to engage more substantively with policymakers via training programmes and workshops materialised. Our view remains that these would be particularly valuable for the 'macroeconomic management of natural resources', 'macro policies and income distribution', 'financial deepening for macroeconomic stability and sustained growth', 'Growth through diversification' and 'gender and macroeconomics' themes.
10. Following staff changes in both DFID and the Fund, the programme steering committee – as described in the original business case - has not met in the past year. Over the past year, during the development of Phase 3, members of the steering committee within the Fund have met to discuss the research proposal and have reported to DFID. Meanwhile, the proposal was discussed with a range of stakeholder in DFID, both thematic policy leads and economists from the International Financial Institutions Department and the Chief Economists Office. Accordingly the proposal was fully scrutinised in an iterative fashion, before final agreement. However, now that Phase 3 is commencing, we should seek to reinvigorate full annual meetings of the steering committee to review and approve annual work plans.

## A. Introduction and Context (1 page)

DevTracker Link to Business Case:	<a href="http://devtracker.dfid.gov.uk/projects/GB-1-202960/documents/">http://devtracker.dfid.gov.uk/projects/GB-1-202960/documents/</a>
DevTracker Link to Log frame:	<a href="http://devtracker.dfid.gov.uk/projects/GB-1-202960/documents/">http://devtracker.dfid.gov.uk/projects/GB-1-202960/documents/</a>

### Outline of the programme

11. There are a number of reasons why DFID began this intervention in macroeconomic research. Firstly, the capacity within the academic community to do macroeconomic research on LICs is small, as is the capacity within LICs to use the evidence for better policymaking. Secondly, global macroeconomic crises following the advanced economies financial crisis of 2007/08 created new challenges for LICs, including much greater access to international financial markets, and increases in non-concessional Government borrowing in many countries. More recently the collapse in many commodity prices, ending the commodity “supercycle”, generated acute macroeconomic pressures in many developing economies that are very challenging to manage. The financial crisis of 2008 and the subsequent Eurozone crisis diverted scarce resources towards solving macroeconomic problems that are primarily of the developed and emerging world. A key rationale for DFID investment in macroeconomic research is to protect and promote the LIC agenda – and this objective remains highly relevant. Development agencies, including DFID, have increased their focus on helping developing countries achieve broad based economic growth and transformation, an objective that is very hard to achieve without a stable macroeconomic and monetary climate.
12. Macroeconomic stability is widely accepted to be a critical foundation for economic growth. It is imperative to allow the formation of accurate expectations about the future, which are essential to allow economic agents in the public and private sectors to make investment, production and consumption decisions. The uncertainty caused by macroeconomic instability is corrosive to planning and LICs are particularly vulnerable to shocks that can instigate periods of instability.
13. “Macroeconomic Research in Low Income Countries” represents a strategic partnership in research between DFID and the IMF, with the intention of:
  - a) enhancing the generation of high-quality research on key macroeconomic issues in low-income countries (LICs);
  - b) ensuring research uptake through the design of the research and its execution in close collaboration with policymakers within and outside the IMF;
  - c) using the IMF’s pulling power to expand the network of macroeconomic researchers working on LICs; and
  - d) achieving this as cost-effectively as possible.
14. The project 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 total, DFID will provide £14.74 million over eight years.
15. The Impact of the project is ‘*Better macroeconomic policy-making in LICs leads to faster economic growth, job creation and poverty reduction in LICs*’.
16. The Outcome of the programme is: ‘*A deeper understanding of, and better engagement by, IMF policy makers on LIC-specific macroeconomic issues, leading to improved policymaking in specific thematic areas.*’
17. The principal objectives of the project are:
  - i) Produce high quality research.

- ii) Strongly encourage the uptake of research by IMF country teams.
- iii) Encourage the uptake of research by country authorities.
- iv) Strengthen engagement by IMF senior policymakers on issues affecting LICs.
- v) Expand the network of researchers working on macroeconomic issues affecting LICs.

## B: PERFORMANCE AND CONCLUSIONS (1-2 pages)

### Annual outcome assessment

18. The Outcome of the programme is: *'A deeper understanding of, and better engagement by, IMF policy makers on LIC-specific macroeconomic issues, leading to improved policymaking in specific thematic areas.'* The indicator for this is "Improved IMF policymaking and integration of LIC-specifics in project thematic areas". It has a high target of 8, and a medium target of 6, thematic areas by March 2016. Through inclusion of a number of research outputs in Article IV programmes<sup>1</sup> and additional technical assistance missions the programme has reached the high target.
19. The team's global survey of gender budgeting efforts formed the basis for one of the five [commitments](#) towards closing the gender gap offered by the IMF Managing Director as part of the UN High Level Panel on Women's Economic Empowerment.
20. The team has achieved the high target for the outcome indicator, displaying a breadth of uptake across thematic areas. The IMF has continued to attain significant depth of uptake in a number of areas, particularly; i) Monetary policy ii) Public investment, growth and debt sustainability iii) and Macroeconomic management of natural resources. Given the current macroeconomic context in many LICs following the continued low prices of commodities, targeting depth of impact in these areas is likely to yield the most direct benefits to economic stability. Examples of outcome achievement can be found in Part 6 of the IMF Annual Report, which is attached in full as an Annex to this Annual Review.
21. It is important to note that in comparison to other research programmes, this partnership with the IMF facilitates very quick results at the outcome level of policy influence. Through their unique position the IMF have very direct access to policy makers and are able to influence policy makers within a few years, something that would be exceptional in other research programmes. Due to this position the IMF are themselves an important target for the programme to influence as this will cascade through to advice to LIC authorities via the country Resident Representatives, Country Missions and central directives of the Fund. The programme has been very successful in achieving this outcome within the Fund, as demonstrated by strong engagement of senior IMF policymakers with the team's work. This included engagement from the IMF Managing Director, Christine Lagarde and The IMF Economic Counsellor and Research Director, Maurice Obstfeld. The Managing Director has begun pushing for IMF country programmes to include gender-related benchmarks, an area that was not traditionally considered part of the Fund's remit.
22. By maintaining an emphasis on peer-reviewed publications and partnerships with external academic researchers, this programme has successfully increased the number of academic participants involved in the dialogue with the Fund about macroeconomics in LICs. In turn this improves the quality of the analysis and boosts confidence in the advice generated. Two prominent academic macroeconomists, Christopher Adam (University of Oxford) and Edward Buffie (Indiana University), have been involved with the programme since the beginning, whilst other academics have become involved each year. In 2016/17 the programme began

<sup>1</sup> Article IV consultations (so called because they are required by Article IV of the IMF's Articles of Agreement) are the ongoing comprehensive consultations with individual member countries, completed by IMF staff. During these a team of IMF economists visits a country to assess economic and financial developments and discuss the country's economic and financial policies with government and central bank officials. All countries agree to participate in these consultations as part of their membership of the IMF. They are usually completed annually, but may be more frequent and involve other intermediate discussions.

engagement with 5 more academics, including Willy Semmler (New School for Social Research) who is both a macroeconomist and leading expert on climate change. Willy's involvement will help the programme to produce new research on optimal macroeconomic policies to help LICs enhance resilience to the effects of climate change.

23. This year the team were able to capitalise on the movement of the former programme lead, Andy Berg, to the position of Deputy Director of the IMF's Institute for Capacity Development (ICD) to continue to integrate technical assistance and training into the project. With additional funding from the IMF Regional Technical Assistance Centres (RTACs), the team provided customised training and technical assistance in modernising monetary policy frameworks to the central banks of Ghana, Mozambique, Malawi, and the East African Community (EAC) Partner States.

### **Overall output score and description**

24. The project has exceeded 75% of its output level "high" targets (an A++ score) and met the "high" targets for the remaining 25% (an A+ score). As a result the project has scored A++ overall. Outputs are about the production of research working papers and published articles, the engagement of IMF staff teams and country authorities, and capacity building.
25. Continued high levels of interest in the research outputs of this programme suggest the research topics continue to be highly relevant to the work of IMF staff teams and country authorities.

### **Key lessons**

26. In this review the Macroeconomics in Low Income Countries project has scored A++ for the fifth consecutive year. Clearly key lessons should be about success. Unfortunately the conditions which produce the success of this project may be partly unique and of limited value to other programmes: first, at the beginning of the project the IMF was ideally placed to put together a really good research team on macroeconomic issues in LICs; but second, and perhaps most importantly, the project enjoys the special advantage that the IMF itself is preeminent in macroeconomic advice for developing countries and so therefore the link into policymaking is very direct. Nonetheless, the second point was no guarantee the programme team would be successful in developing a strong audience inside the IMF and they have worked hard to do so. During discussions developing the third phase of the programme, both DFID and the IMF have reflected carefully on the consistent performance of the project. We will learn from this past performance to calibrate milestone targets for the future. These are likely to be more challenging. Whilst the IMF has continually exceeded the "high" targets, it has not done so by amounts so substantial as to suggest a total failure to understand what was possible, thereby invalidating the logframe. In our view it would have been unreasonable to shift the goal posts each year during the two year second phase. The current transition, from phase 2 to 3, is the appropriate time to tighten the logframe targets.
27. The team's continued success in getting direct applications of research in particular countries is very impressive, and it would be good to emulate this in other programmes. DFID's Growth Research Team will continue to examine ways to improve coordination between research programmes in an effort to maximise opportunities for policy impact from the overall portfolio.

### **Has the logframe been updated since the last review?**

28. The logframe is being updated as part of the transition from Phase 2 to Phase 3. This will be completed in July 2017.

## C: DETAILED OUTPUT SCORING (1 page per output)

<b>Output Title</b>	<i>Produce high quality, policy relevant research on macroeconomic issues affecting LICs</i>		
Output number per LF	<b>1</b>	<b>Output Score</b>	<b>A++</b>
Risk:	<i>Low</i>	Impact weighting (%):	30
Risk revised since last AR?	<i>N</i>	Impact weighting % revised since last AR?	<i>N</i>

Indicator(s)	Milestones	Progress
1.1 Number of priority research working papers produced	By March 2017, accumulative. H (68 papers) M (58 papers) L (48 papers)	<b>Exceeded expectations</b>  19 produced in 2016/17 (against an in year high target of 16) 75 accumulative (110% of high target)
1.2 Number of research papers accepted for publication in top journals	By March 2017, accumulative H (17) M (11) L (8)	<b>Significantly Exceeded expectations</b>  13 published <u>during</u> 2016/17 (against an in year high target of 8) 37 published in total. (218% of high target)
1.3 Number of freely available books published.	During 2016/17, H (2) M (1) L (0)	<b>Slightly exceeded expectations</b>  2 produced in 2016/17 (high target met)

### Key Points

29. This year, the researchers completed nineteen working papers, bringing the total to seventy five over the last five years against a high target of 68. Continuing to increase the number of working papers at or above the high target *within each year* is superb, as it provides greater possibility for peer reviewed publication in the future, as well as demonstrating the enthusiasm with which issues of macroeconomics in LICs have been taken up in the Fund – a critical objective of the programme. The papers cover six broad topics of this research project: Monetary and Exchange Rate Policy in LICs; Public investment, Growth, and Debt Sustainability; Macroeconomic Management of Natural Resources; Capital Flows; Financial Deepening and Macroeconomic Stability and Sustained Growth and Gender and Macroeconomics. Links to all nineteen working papers can be found on pg 7 of the appendix.
30. During the last year the team published thirteen papers externally, including book chapters, bringing the total to thirty seven over the five years of the programme against a high target of 17. The IMF team have responded well to recommendations in the last two Annual Reviews to publish in high-quality economic journals. This is not a simple task for papers dealing with issues of macroeconomics and monetary economics in Low Income Countries. The competition for publication in high-quality journals is fierce. A large quantity of very high quality empirical research is completed each year focused on High Income Countries and Emerging Markets, with which the programmes outputs must compete. Two papers were published in the *Journal of Money, Credit and Banking* and the *Journal of International Money and Finance*, which are both leading journals for monetary economics. Three others were published in journals that are in the



top 25-50 range for economics journals. All of these are near the top of the top quartile of economics journals. Published articles were as follows:

Forthcoming in the *Journal of Money Credit and Banking*:

- i) [Bilateral Capital Flows to Developing Countries at Intensive and Extensive Margins](#)

In the February 2017 issue of the *Journal of International Money and Finance*

- ii) [Joining the club? Procyclicality of private capital inflows in lower income developing economies](#)

*Juliana D. Araujo, Antonio C. Davida, Carlos van Hombeeckb, Chris Papageorgioua*

In the *World Bank Economic Review*.

- iii) [Remittances and Vulnerability in Developing Countries](#)

*Giulia Bettin, Andrea F. Presbitero and Nikola Spatafora*

Two articles were published in the *IMF Economic Review* (open access)

- iv) [Non-FDI Private Capital Inflows in Low-Income Countries: Catching the Wave?](#)

*Juliana D. Araujo, Antonio C. David, Carlos van Hombeeck, Chris Papageorgiou*

- v) [IMF lending and banking crises](#)

*Luca Papi, Andrea F Presbitero, Alberto Zazzaro*

In the May 2016 issue of *Economic Modelling* (open access)

- vi) [Income growth and inequality: The threshold effects of trade and financial openness](#)

*C.G. Lim, Paul D. McNelis*

In the September 2016 issue of the *Journal of Macroeconomics* (open access)

- vii) [Fiscal limits in developing countries: A DSGE Approach](#)

*Huixin Bi, Wenyi Shen, Shu-Chun, S. Yang*

In the March 2017 issue of *International Economics* (open access)

- viii) [From natural resource boom to sustainable economic growth: Lessons from Mongolia](#)

*Bin Grace Li, Pranav Gupta, Jiangyan Yu*

In the June 2016 issue of the *Review of Development Finance* (open access)

- ix) [Sovereign bonds in developing countries: Drivers of issuance and spreads](#)

*Andrea F. Presbitero, Dhaneshwar Ghura, Olumuyiwa S. Adediji, Lamin Njie*

In the May 2017 issue of the *Journal of Policy Modelling* (open access)

- x) [Emerging and Developing Economies: Entering a Rough Patch or Protracted Low Gear?](#)

*Rupa Duttagupta, Futoshi Narita*

*Book chapters*

- xi) [Financial Liberalization, Inequality and Inclusion in Low-Income Countries](#)

*In Dynamic Modeling and Econometrics in Economics and Finance*

- xii) [Public Sector Investment Efficiency in Developing Economies](#)

*In The New Palgrave Dictionary of Economics, (forthcoming)*

- xiii) [Empowering Women Can Diversify the Economy](#)

*In [Women, Work, and Economic Growth: Levelling the Playing Field](#) (open access)*

31. In addition to working papers and published articles, two full books were accepted for publication equal to the high cumulative target. These collect together bodies of work, allowing for a deeper



exploration of topics, which is preferable for researchers and expert policymakers. The first book, 'Monetary Policy in sub-Saharan Africa' has been accepted for publication by Oxford University Press. It examines the current challenges to monetary policy in sub-Saharan Africa and efforts to address them through new, context specific macroeconomic models. The second book, 'Gender Equality and Fiscal Policies', has been accepted for publication by the IMF Publication Division, who are covering editing and publication costs. This book offers a summary of lessons learned from the programmes global study of gender budgeting and describes significant gender budgeting efforts in various regions around the world. We feel this is a significant piece of work in a topic that remains an important focus of the programme and a key policy area for DFID - one that is difficult to get macro practitioners to engage in.

32. The programme continues to perform very strongly. The total quantity of publications continues to substantially exceed the high targets, both in the cumulative numbers – where figures reflect performance in all years – and in the numbers for the most recent year. This Annual Review marks the end of the programmes second Phase, the period for which logframe targets have been established. As a result cumulative figures are most important since we are interested in total outputs, rather than focusing on in-year activity which can be adversely affected by external factors, such as delays in gaining access to data or the publication schedules of academic journals.
33. The success in getting published in top tier journals is illustrative of the quality of the programmes outputs, as well as of the management team to successfully respond to DFID requests. These publications will continue to enhance the profile of LIC specific macroeconomic and monetary economic issues in broader academic and policy circles.
34. Given the continued success this output again scores A++, the same achieved last year.

#### **Summary of responses to issues raised in previous annual reviews (where relevant)**

35. Broadly, the responses to issues raised in the last annual review have been very positive, especially with regard to the improvement of publications in peer-reviewed journals.
36. The 2016 and 2015 Annual Reviews encouraged the IMF to produce policy briefs, but with limited effect. However, they do not appear in the programme logframe and are not vital to successful delivery of the objectives it sets out. A number of the programme staff at the Fund writes regular blogs highlighting the work the programme is undertaking and key findings in a more easily accessible format than the papers themselves. During 2016, we agreed that this approach was sufficient. The key stakeholders groups able to affect macroeconomic policy in LICs are quite small in number and are well known to the programme management team, especially as the IMF itself is the main one we are trying to influence. As a result the management team have a good sense of how to achieve this and judge policy briefs to have limited impact at this stage. We are now transitioning into the third phase of the programme and will revisit this subject with the Fund. As the stock of outputs has increased there is more material to draw on to produce comprehensive policy briefs. There may be an argument to produce these briefs in order to speak more directly to policymakers in LIC authorities and to encourage more researchers into the area of macroeconomics in LICs.
37. The 2015 AR concluded that the development of the third phase is the appropriate moment to revisit – and possibly increase - performance expectations as set out in the logframe. This process is underway and is scheduled for completion in June / July 2017.

#### **Recommendations**

38. Once again the review team notes that there has been impressive performance of the programme during the last year of operation. We believe that the programme is building a strong momentum of performance and are reluctant to risk derailing it with substantial changes to the fundamentals of the model.
  - i) Finalise the Phase 3 research agenda by July 2017.

- ii) Complete the update of the research targets within the logframe for the third Phase of the programme by July 2017.
- iii) Revisit the idea of producing policy briefs to broaden the readership and reach of the outputs and consider adding this to the logframe in the future.

<b>Output Title</b>	<i>IMF Research Products produced under this project used by IMF country teams and partner authorities.</i>		
Output number per LF	<b>2</b>	<b>Output Score</b>	<b>A++</b>
Risk:	<i>Low</i>	Impact weighting (%):	30
Risk revised since last AR?	<i>N</i>	Impact weighting % revised since last AR?	<i>N</i>

<b>Indicator(s)</b>	<b>Milestones</b>	<b>Progress</b>
2.1 Application and use of tools and frameworks by country teams.	Applications by IMF country teams by March 2017, cumulative: H (38) M (25) L (16)	<b>Exceeded expectations</b>  16 applications in 2016/17 (against an in year high target of 12)  Cumulatively 64 (168% of the high target)
2.2 Application and use of tools and frameworks by country authorities.	Applications by country authorities by March 2017, cumulative: H (11) M (8) L (6)	<b>Exceeded expectations</b>  7 applications in 2016/17 (against an in-year high target of 3)  Cumulatively 16 (145% of the high target)

### Key Points

39. IMF Country Teams have completed 16 applications of the programmes work this this year, covering four broad topics: 1) Monetary and Exchange Rate Policies; 2) Public investment, debt, and debt sustainability; 3) Macroeconomic policies and income distribution; 4) Growth through diversification. Many of these applications took place through Article IV Missions and Selected Issues Papers.
40. Research on *monetary policy and exchange rate policies* has resulted in the development of the 'Forecasting and Policy Analysis System (FPAS)', a small macroeconomic model used extensively to guide central banks in LICs in their monetary policy decisions. Over the past year the IMF's Institute for Capacity Development (ICD) ran a training programme for members of the African Department (AFR). This consisted of a series of lectures on the FPAS, software training and a series of practical sessions in modelling and forecasting. The ultimate objective is to enable staff in AFR to use a customised FPAS to facilitate discussions with SSA authorities. This should lead to more extensive application of the programmes work on monetary policy and exchange rate policies by country authorities in the future. Former macroeconomics in LICs programme manager, Andy Berg, is now Deputy Director of ICD and is proving influential at increasing uptake of the programmes outputs.
41. Research on *public investment, growth and debt sustainability* was applied to Burkina Faso, Kyrgyz Republic, the Maldives and Namibia. This work focused on applying the DIG model to help countries assess their public investment strategies. In particular employment of the model identifies the risks to debt sustainability associated with different growth and implementation efficiency assumptions. Identification of the most critical sensitivities in forecast assumptions helps countries to optimise their fiscal consolidation strategies and mitigate the most serious risks, enhancing macroeconomic stability.

42. The Macroeconomic and Distributional Analysis Model (MDAM) is a core part of the programmes research on *macroeconomic policies and income distribution*. During 2016 this model was applied to Guatemala, Honduras, Bolivia, Myanmar and Morocco, as well as being presented to IMF Country Teams through an internal training course run by ICD. This model has been developed to evaluate the distributional impact of various macroeconomic policies, both on the overall economy or on various sectors or segments of the population. This model was applied in Myanmar via both a Selected Issues paper and an Article IV Consultation. The results demonstrated the benefits of financial liberalisation to: increase savings, private credit and growth; reduce inequality and poverty; and increase the output of the agricultural sector, benefitting the rural population, through increases in income and private credit. The Mission Chief in Myanmar reports that the authorities are highly receptive to the findings of the model and are actively considering policy recommendations. The analysis is also helping drive engagement with other stakeholders. Full details of all applications of the MDAM model can be found in the Appendix.
43. Research on *growth through diversification* was applied in Sierra Leone, Liberia, Senegal and Vanuatu. Persistently low commodity prices have focused attention in Sierra Leone and Liberia on the need for economic diversification, both to build macroeconomic resilience to future commodity price swings and build additional growth drivers. In Selected Issues Papers the IMF have applied data from the diversification toolkit developed by the programme to assist these countries to better understand their export structure and opportunities for export diversification. Full details in the Appendix.
44. There were seven cases of uptake by country authorities in 2016/17. Four were focused on central banks in the SSA region, in Ghana, Tanzania, Malawi and Mozambique. In each the IMF is now engaged in continual training, supporting improvements in the decision making process through the use of the FPAS model and staff capacity to employ analysis and forecasting techniques. In this way the IMF is helping these countries modernise their monetary policy frameworks and transition to an interest rate based regime.
45. Over the past year the IMF has also been deepening ties with the East African Community (EAC) Monetary Affairs Committee and delivered two presentations at the annual Committee meeting focused on the role of FPAS as a system to underpin forward-looking monetary policy. The IMF team has been asked to moderate the EAC FPAS working group, established as forum for peer-to-peer learning at the EAC, and in doing so has secured an ongoing relationship.
46. During the year the IMF team held two workshops as part of the roll out of the IMF Board Paper “Evolving Monetary Policy Frameworks in Low-Income and Other Developing Countries”. These events were peer-to-peer workshops for mid and high level officials from SSA central banks and aim to build a cadre of expertise on the continent. Participants reported high levels of satisfaction with the events and noted the importance of these structural models to their monetary policy frameworks. An important outcome of the event was recognition by the participants of the need to understand the narrative of the modelling in FPAS and ‘sense check’ the results against other sources, rather than blindly trusting the outputs of the model. This sort of event is an important contribution towards the modernisation of a key part of monetary policy in SSA and standardising a methodological, technical approach across the continent.
47. The programme has continued to exceed expectations at gaining prominence in the training and technical activities of the Fund. The movement of the former lead of the IMF/DFID programme to become the Deputy Director of the IMF Institute for Capacity Development has helped with these activities. The programme deserves its A++ score.

## Recommendations

48. As noted last year, country applications by IMF teams and country authorities tend to be quite demand driven, but this can be stimulated by training courses. Given the successful engagement with the EAC Monetary Policy framework and the peer-to-peer workshops on FPAS, the IMF team should follow up with participants in these to drive closer engagement and influence policy making

in interested central banks. The Fund team make it clear that the ability to respond to training needs and conduct country applications is only possible because of DFID funding.

49. Given the important contribution of training courses to dissemination and uptake of the research outputs, we should making support to training courses an explicit logframe output in Phase 3. This would also highlight the need to DFID to support this work and link it to the production of research, ensuring that future research work remains partially demand led.
50. We should explore getting the IMF team to share some of their experiences of provide training courses with other Growth Research Team programmes, for example the IGC and UNU-WIDER, in order to properly leverage DFID's research network outreach.
51. We should consider how best to inform DFID country and policy teams of the activities of the Fund. This is especially important in DFID focus countries, such as Ghana, Malawi and Nigeria that are grappling with issues for which this research agenda is highly relevant.

<b>Output Title</b>	<i>IMF strengthens engagement by senior IMF policy makers on macroeconomic issues affecting LICs</i>		
Output number per LF	<b>3</b>	<b>Output Score</b>	<b>A++</b>
Risk:	<i>Low</i>	Impact weighting (%):	30
Risk revised since last AR?	<i>N</i>	Impact weighting % revised since last AR?	<i>N</i>

<b>Indicator(s)</b>	<b>Milestones</b>	<b>Progress</b>
3.1 High level policy conferences attended by senior IMF staff reflect findings of research papers funded under this project.	By March 2017, policy conferences drawing on outputs from the project: H (11) M (9) L (6)	<b>Exceeded expectations</b>  9 conferences in 2016/17 (against an in year high target of 3)  Cumulatively 22 (200% of the high target)
3.2 Results of the research papers produced reflected in IMF Board discussions, IMF policy papers such as Staff Discussion Notes, policy memos to management, and the like.	By March 2017, evidence of research in number of IMF Board/Staff Discussion Notes/etc. papers: H (11) M (6) L (4)	<b>Exceeded expectations</b>  6 pieces in 2016/17 (against an in-year high target of 3)  Cumulatively 19 (173% of high target)

3.2.1 Results of the research papers produced reflected in IMF Board papers.	By March 2017, evidence of research reflected in a number of IMF Board Papers H (7) M (5) L (4)	<b>Exceeded expectations</b>  2 pieces in 2016/17 (against an in-year high target of 1)  Cumulatively 11 (157% of high target)

## Key Points

52. Researchers in the programme participated in nine high-level policy conferences in FY2016/17, reaching a total of 22 during Phase 2 of the programme compared to a high target of 11. Two conferences focused on gender and macroeconomics, historically an under-researched area and a critical focus of this programme. At [a conference in March 2017](#) the IMF Managing Director and the IMF Economic Counsellor and Research Director, Maurice Obstfeld, both remarked on the macro-criticality of gender equality, demonstrating the success the programme is having at influencing the approach to macroeconomics. At the event the Managing Director, Christine Lagarde, also announced that she would push for IMF country programs to include gender-related benchmarks. This is a significant result for the programme in influencing policy makers at the IMF. A one-day conference on Fiscal Policies and Gender Equality in November 2016 featured an open session attended by 225 people from a range of organisations including influential multilateral agencies. The opening session was led by Christine Lagarde. The conference was covered by a range of media outlets including [The New York Times](#), [Yahoo!](#), [News Nation](#), [Plant](#), [The China Post](#), [The Daily Sabah](#), [The Hamilton Spectator](#), and [The New Jersey Herald](#).
53. A one day conference on sustainable economic development at the IMF 2016 Spring Meetings, '[Low-income and Developing Countries: Conference on Sustainable Economic Development in a Challenging Global Environment](#)' explored issues of inequality and public investment. The event was very well attended by senior policymakers; panellists included the IMF Managing Director, Christine Lagarde; two Deputy Managing Directors; the Directors of the IMF African Department and the Strategy, Policy, and Review Department; the Deputy Director of the IMF Research Department and a number of external experts. This demonstrates that the programme is managing to reach the senior policymakers that are able to affect the policy process.
54. The programme's research was reflected in six major IMF reports in FY2016/17, bringing the cumulative total for Phase 2 to 19 against a high target of 11. These reports included two papers for discussion by the IMF Executive Board, two features in the flagship World Economic Outlook, one Staff Discussion Note and one feature in the Sub-Saharan Africa Regional Economic Outlook (Outputs 3.2 and 3.2.1).
55. The two papers prepared for discussion by the IMF Executive Board were i) [Macroeconomic Developments and Prospects in Low-Income Developing Countries - 2016](#) and ii) [Small States' Resilience to Natural Disasters and Climate Change - Role for the IMF](#). The first examined the set of issues countries face in adjusting to the "lower for longer" commodity prices and options for LIDCs to accelerate infrastructure investment to alleviate medium term growth constraints. The second examined the disproportionate threat of natural disasters and climate change to small states (9% of natural disasters affecting small states involve damage of more than 30% of GDP

compared to less than 1% for larger states). Among other things researchers from the programme contributed modelling on the impacts of natural disasters and alternate policy actions.

## Recommendations

56. None

<b>Output Title</b>	<i>IMF strengthens capacity building by expanding the network of LIC researchers who are new to the field of macroeconomic research on LICs.</i>		
Output number per LF	<b>4</b>	<b>Output Score</b>	<b>A++</b>
Risk:	<i>Low</i>	Impact weighting (%):	10
Risk revised since last AR?	<i>N</i>	Impact weighting % revised since last AR?	<i>N</i>

Indicator(s)	Milestones	Progress
4.1 Number of commissioned research papers produced on thematic areas.	By March 2017, number of commissioned papers: H (20) M (18) L (10)	<b>Slightly exceeded expectations</b>  7 produced in 2016/17 (against an in-year high target of 4)  Cumulatively 20 (equal to the high target)
4.1.1 Toolkits offering publically available datasets to encourage further uptake of work and expand network of researchers	By March 2017, toolkits produced:	<b>Exceeded expectations</b>

	H (3) M (2) L (1)	3 toolkits produced in 2016/17 (against an in-year high target of 1)  Cumulatively 5 (167% of high target)
4.2 Attendance of number of external researchers at high-level policy conferences.	By March 2017, number of conferences: H (11) M (9) L (6)	<b>Exceeded expectations</b>  20 conferences attended in 2016/17 (against an in-year high target of 3)  Cumulatively 51 (464% of high target)
4.3 Outputs and project disseminated in e-newsletter and updated public webpage (number of updates of e-newsletter and/or webpage)	By March 2017, number of updates: H (18) M (14) L (10)	<b>Slightly exceeded expectations</b>  4 updates in 2016/17 (against an in-year high target of 4)  Cumulatively 18 (equal to the high target)

## Key Points

57. The team have met the high target for commissioned research papers produced on thematic areas. This refers to commissions of macroeconomic researchers to work on the thematic research areas of the IMF-DFID programme and represents part of the programmes efforts to attract more macroeconomic researchers to address questions of macroeconomics in LICs.
58. The programme released three toolkits this year. Two provided the first comprehensive analyses in their areas; one was the [first compilation](#) of detailed historical and new data on world trade in services; another, the [IMF Gender Portal](#) was the first-ever global review of policymakers' use of tax and spending policies to promote gender equality and included an online database toolkit of gender equality indicators worldwide. These are superb contributions to our understanding of these policy areas. The last was a toolkit to conduct incidence analysis of fuel price subsidy reform. It provides estimates of the welfare impacts of increases in fuel prices, and the distribution of these impacts across household income groups. The toolkit is in an Excel format to maximise accessibility and has been used by country teams in technical assistance work.
59. The team made 20 presentations at high level conferences in 2016/17. Nine of these were at a single conference at [The Centre for the Study of African Economies \(CSAE\)](#) at Oxford University. Engagement at this conference involved an intense amount of work by the team and each presentation has been counted as a separate incident ([program](#)) rather than a single conference in order not to create a perverse incentive that encourage the team to prioritise attendance at a number of low key conferences, rather than an intensive engagement with a high profile conference such as CSAE. The purpose of this indicator is to encourage the team to engage with academics,



researchers and policymakers outside of the IMF. The CSAE conference is prominent within those networks and has a website that is frequently visited by a large community of researchers. Even if we had counted these 9 presentations as a single conference - most other conferences involve a single presentation – the programme would still have exceeded the high target. All details and links to presentations are available in the appendix.

60. Four newsletters were issued, highlighting working papers, conferences, and other activities completed over the preceding three months. They are available here:

[May 2016 Newsletter](#)

[August 2016 Newsletter](#)

[November 2016 Newsletter](#)

[February 2017 Newsletter](#)

61. This is a strong performance all implicit in-year “high” targets have been exceeded. Similar performance in earlier years means that cumulative targets have been substantially exceeded in many cases. This is another A++.

## **Recommendations**

62. None

**Key cost drivers and performance**

63. We do not foresee any changes in costs structures over the second phase as a result of exchange rates.
64. Throughout this programme the Fund has been extremely precise in its cost estimates – incorporating salary increases etc. without any suggestion that more resources might be required to complete either phase. Any such increases have been predictable, so costs have been straightforward to manage. Direct programme management costs and the Trust Fund management fee amount to less than 9% of the total budget. The Direct programme management costs alone represent less than 2% of the total budget, suggesting high management performance that allows a very high proportion of funds to be available for research.

**VfM performance compared to the original VfM proposition in the business case**

65. The table below shows the cost per paper over the first five years of the project. The team estimate that staff, contractual employees, and visiting scholars spend 75 percent of their time on research papers, while the remaining 25 percent is devoted to country applications work. The total staff, contractual and visiting scholar cost (see Table 1) is thus split between papers and applications. The cost per working paper after 5 years is approximately \$101,000 (£79,528<sup>2</sup>), a slight decrease on the unit cost after 4 years, reported in the last annual review (\$104,213 (£82,057)). The cost per published paper after 4 years is \$206,000 (£162,204), also a slight decrease on the unit cost after 4 years as reported in the last Annual Review (\$243,163, (£191,466)). Both of these costs continue to compare favourably against other DFID research programmes. An independent review of programmes in the Growth Research Team portfolio completed by RAND Europe in 2015 indicated a unit cost range of £154,346 - £173,418 for high quality journal articles.
66. The Business Case (BC) predicted 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 will be published - and so it is principally discussing working papers. In the event, the programme has achieved a unit cost of \$101,000 for working papers indicating excellent performance. Moreover, the unit cost achieved per published paper, which takes significantly more work on revisions, is very close to this research paper figure. 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.
67. It is important to note that there is a lag involved in getting working papers accepted for publication in peer-reviewed journals. As time progresses more existing working papers will be submitted to journals and accepted for publication, so that the cost per published paper is expected to decrease slightly further.
68. The programme has been able to make use of IMF training facilities in the SSA region, bringing LIC authorities to a single location for training, rather than travelling around the continent to several countries. This is highly beneficial. Air travel and accommodation that meets safety requirements is often expensive in Africa, such that eliminating time wasted to recover from travel is correspondingly valuable. The IMF have negotiated preferential accommodation rates near their training facility and bringing everyone to established training facilities ensures control over

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<sup>2</sup> Please note that the exchange rate used is £1 : US\$ 1.27, taken from xe.com on 25/06/2017. The figures in GBP for Year 4 have been recalculated using this exchange rate to allow better comparability following the fall in value of GBP in June / July 2016 of around 13% on the exchange rate used in the last review (£1 : \$1.46).

the quality of workshops and builds a cadre of expertise among LIC monetary and macroeconomic policymakers.

Table 1: Cost per Working and Published Paper Years 1 - 5

IMF Staff	\$ 2,137,794
Contractuals	\$ 5,872,923
Visiting Scholars (VS)	\$ 2,157,959
Total Staff/Contractual/VS Costs	\$ 10,168,676
Split between:	
Research Paper Costs (75%)	\$ 7,626,507
Country Applications Costs (25%)	\$ 2,542,169
Working Papers Produced	75
Cost Per Working Paper	\$ 101,687
Published Papers Produced	37
Cost per Published Paper	\$ 206,122

### Assessment of whether the programme continues to represent value for money

69. This programme is still regarded to represent very good value for money, as it is achieving outstanding results (exceeding 'high' targets), especially with regard to uptake by IMF teams and LIC authorities.

70. This project is highly cost effective for several reasons:

- The project strictly follows all IMF guidelines for hiring, travel, and conferences. All contractual hires undergo a competitive process.
- Outputs are produced under firm timeframes and must meet Fund requirements for publication.
- The quality of the papers is further evaluated when the papers are submitted to peer-reviewed publications. To date, there are 39 peer-reviewed publications (journal articles & books).
- Perhaps most importantly, the IMF research team has a unique ability to quickly communicate research findings to influential IMF country resident representatives and country missions to achieve policy impact. This is extremely valuable. Attribution of policy changes by country authorities to this work is challenging – as is always the case with economic policy research, which needs to form a body of evidence to be convincing due to the underlying complexity of the subject matter. The IMF have close relationships with LIC authority policy makers that somewhat reduce the information constraints to enable attribution. However, the effectiveness of these relationships is in part predicated on confidentiality and, as a result, we have not pushed the IMF for details.

71. The table below compares the number of working/published papers produced under the DFID project to the overall number of LIC-focused IMF working/published papers from 2012-2015. In each year, the share of DFID papers published is higher than the share of the IMF papers published, which speaks to the quality of the team's work. The absolute number of LIC-focused papers produced elsewhere in the IMF remained steady and low over the 4 years, averaging 2.25 a year. The papers produced under the DFID project are additional and much more numerous, averaging 11.5 per year.

Table 2: DFID and IMF Working and Published Papers

Year	DFID-sponsored Working Papers			Other IMF LIC Working Papers		
	Number	Of which published Number	Share	Number	Of which published Number	Share
2012	6	2	33%	32	3	9%
2013	16	3	19%	29	4	14%
2014	8	2	25%	31	0	0%
2015	16	3	19%	33	2	6%
Total	46	10	22%	125	9	7%

### Quality of financial management

72. Out of a total budget for the 5 years of \$15.13 million, \$13.27million had been drawn down as of April 2017. This reflects a lag of 2 - 3 months from actual expenses before funds are drawn down from the UK donor subaccount, allowing for expense verification and similar fiduciary checks. As a result, as at April 2017, approximately \$1.87million remains in the account, all of which is committed to ongoing activities.

73. Low overhead costs mean that the vast majority of the funds available to this project were spent on producing and disseminating high quality research rather than on project management. The Trust Fund management fee is charged at a rate set outside the control of the programme managers in DFID or the IMF team.

Date of last narrative financial report	June 2017
Date of last audited annual statement	30 April 2016 <sup>3</sup>

<sup>3</sup> The next statement is due from the IMF Finance Department in October 2017.

## **E: RISK** (½ page)

### **Overall risk rating: Minor**

74. The overall risk rating for this project has always been Minor (low). The IMF distributes the research outputs very well both internally and externally and has built a good reputation among the wider community of researchers looking at macroeconomic issues in LICs. It is difficult to clearly identify, attribute and measure clear results on increasing interest in the challenges facing LICs within the IMF. However, given the large number of researchers that have worked with the IMF/DFID team, have transitioned into other roles in the Fund, as well as the engagement by very senior staff, we feel the programme is being successful in this objective. Demand for the research remains high both inside and outside the Fund. The team successfully engages both with IMF Resident Representatives and Missions and has assisted with a number of core analyses, such as Article IV visits.
75. As the project gets further through its work programme and continues to score very highly on performance, the risk of overall failure continues to decline. In light of this, the 3<sup>rd</sup> Phase of the programme will maximise the return to goodwill the programme has built up.

## **F: COMMERCIAL CONSIDERATIONS** (½ page)

### **Delivery against planned timeframe**

76. Once again, the IMF team has exceeded the majority of its high output milestones. Where it hasn't it has met the high targets, which are calibrated to be slightly above our expectations for performance as per the arguments set out in the approved Business Case and Addendums.
77. Ultimately, this programme is interested in cumulative outputs. This is because the research and engagement with country authorities can be delayed for reasons outside the manager's control. Macroeconomic and monetary policy is extremely complex and affects a complex system. No single paper can be definitive. Instead, research adds to a body of evidence and needs to be of a high quality to have the most impact upon it. The impact of high quality research diminishes very little over time. Research is regularly subject to delays outside the control of research teams. Access to data can be delayed by authorities, journal review boards can delay their review schedule, and once approved journals control the date of actual publication. By focussing on cumulative figures we avoided creating perverse incentives by focusing on in-year performance.
78. Some cumulative figures achieved by the team far exceed the target, raising a question about whether the figures were reasonable. In our view the large cumulative output is the result of hard work by the team crystallising into slight over-achievements on the implied in-year targets in each year. The Phase 2 of the programme lasted only 2 years, with an update to the logframe targets at the beginning of that Phase. Given the short duration of the second phase, in our view the appropriate time to change delivery expectations was the transition from Phase 2 to Phase 3 and this is now underway. The programme might not continue to substantially exceed expectations following the adjustment to expectations, but this should not be interpreted as a change in performance by the programme.

## **G: CONDITIONALITY** (½ page)

### **Update on partnership principles (if relevant)**

79. Macroeconomics in Low Income Countries is a global research programme focussed on LICs, including DFID focus countries. No funding is passed to country governments or similar bodies and as such partnership principles are not applicable. 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.

## **H: MONITORING & EVALUATION** (½ page)

### **Evidence and evaluation**

80. The fundamental evidence for the need for this programme remains largely unchanged from that set out in the original business case and continued to form the foundation for the costed extension approved in June 2016. An evaluation is not applicable.
81. The theory of change for this programme remains valid. 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 programmes 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.
82. Throughout 2016, the IMF has been completing the final implementation of the second Phase of the programme. This has required minimal monitoring in-year as Phase 2 monies were allocated to ongoing commitments. All further research was planned within the context of the costed extension, which took priority for in-year engagement between DFID and the IMF. DFID staff from the Growth Research Team, the International Financial Institutions Department and the UK Representative on the IMF Executive Board, met with the IMF team on several occasions during 2016 to discuss research priorities beyond the Phase 2 activities. DFID and the IMF completed several rounds of negotiation on the Phase 3 research proposal, with input from policy leads in DFID and the Chief Economists Office. As per the original BC, this programme is managed via an informal governance structure comprising of a steering committee that has met annually via video conference. This structure will be refreshed for the third Phase and will be the body that monitors the programme's work in the 3<sup>rd</sup> Phase.
83. Alongside this process, the SRO for the programme in DFID's Growth Research Team, meets with the IMF project manager once a month by telephone to obtain a forward look of research progress and events. Any issues are addressed as they arise, through additional meetings or visits, as necessary. This process continued throughout 2016. DFID staff from the Growth Research Team and the International Financial Institutions Department, as well as UK Representatives to the IMF Board, have met with the IMF project managers several times in person during FY16/17, both in Washington DC and at DFID in London.
84. The research programme for the third phase has been refreshed in light of the progressed achieved to date. Some activities are now focused more on dissemination, particularly the work on debt sustainability and public investment, and monetary policy. At the same time, other areas have been emphasised, or introduced, including on resilience to disasters, migration and conflict.

### **This Annual Review**

85. This AR was conducted by the SRO Mark Dray (GRT Economic Adviser) and Dawn Wood (GRT Deputy Programme Manager), with independent inputs from Andy Hinsley (in DFID International Financial Institutions Department, IFID), and quality assurance from Tim Hatton (GRT Senior Programme Manager).

# Smart Guide

The Annual Review is part of a continuous process of review and improvement throughout the programme cycle. At each formal review, the performance and ongoing relevance of the programme are assessed with decisions taken by the spending team as to whether the programme should continue, be reset or stopped.

The Annual Review includes specific, time-bound recommendations for action, consistent with the key findings. These actions – which in the case of poor performance will include improvement measures – are elaborated in further detail in delivery plans. Teams should refer to the Smart Rules quality standards for annual reviews.

The Annual Review assesses and rates outputs using the following rating scale. ARIES and the separate programme scoring calculation sheet will calculate the overall output score taking account of the weightings and individual outputs scores

Description	Scale
Outputs substantially exceeded expectation	A++
Outputs moderately exceeded expectation	A+
Outputs met expectation	A
Outputs moderately did not meet expectation	B
Outputs substantially did not meet expectation	C

Teams should refer to the considerations below as a guide to completing the annual review template.

## Summary Sheet

Complete the summary sheet with highlights of progress, lessons learnt and action on previous recommendations

## Introduction and Context

Briefly outline the programme, expected results and contribution to the overall Operational Plan and DFID's international development objectives (including corporate results targets). Where the context supporting the intervention has changed from that outlined in the original programme documents explain what this will mean for UK support

## B: Performance and conclusions

### Annual Outcome Assessment

Brief assessment of whether we expect to achieve the outcome by the end of the programme

### Overall Output Score and Description

Progress against the milestones and results achieved that were expected as at the time of this review.

### Key lessons

Any key lessons you and your partners have learned from this programme

Have assumptions changed since design? Would you do differently if re-designing this programme?

How will you and your partners share the lessons learned more widely in your team, across DFID and externally

### Key actions

Any further information on actions (not covered in Summary Sheet) including timelines for completion and team member responsible

**Has the logframe been updated since the last review?** What/if any are the key changes and what does this mean for the programme?

## C: Detailed Output Scoring

Output



Set out the Output, Output Score

### **Score**

Enter a rating using the rating scale A++ to C.

### **Impact Weighting (%)**

Enter the %age number which cannot be less than 10%.

The figure here should match the Impact Weight currently shown on the logframe (and which will need to be entered on ARIES as part of loading the Annual Review for approval).

Revised since last Annual Review (Y/N).

### **Risk Rating**

Risk Rating: Low/Medium/High

Enter Low, Medium or High

The Risk Rating here should match the Risk currently shown on the logframe (and which will need to be entered on ARIES as part of loading the Annual Review for approval).

Where the Risk for this Output been revised since the last review (or since inception, if this is the first review) or if the review identifies that it needs revision explain why, referring to section B Risk Assessment

### **Key points**

**Summary of response to programme issues raised in previous annual reviews (where relevant)**

### **Recommendations**

Repeat above for each Output.

## **D Value for Money and Financial Performance**

### **Key cost drivers and performance**

Consider the specific costs and cost drivers identified in the Business Case

Have there been changes from those identified in previous reviews or at programme approval. If so, why?

**VfM performance compared to the original VfM proposition in the business case?** Performance against VfM measures and any trigger points that were identified to track through the programme

### **Assessment of whether the programme continues to represent value for money?**

Overall view on whether the programme is good value for money. If not, why, and what actions need to be taken?

### **Quality of Financial Management**

Consider our best estimate of future costs against the current approved budget and forecasting profile

Have narrative and financial reporting requirements been adhered to. Include details of last report

Have auditing requirements been met. Include details of last report

## **E Risk**

### **Output Risk Rating: L/M/H**

Enter Low, Medium or High, taken from the overall Output risk score calculated in ARIES

### **Overview of Programme Risk**

What are the changes to the overall risk environment/ context and why?

Review the key risks that affect the successful delivery of the expected results.

Are there any different or new mitigating actions that will be required to address these risks and whether the existing mitigating actions are directly addressing the identifiable risks?

Any additional checks and controls are required to ensure that UK funds are not lost, for example to fraud or corruption.

### **Outstanding actions from risk assessment**

Describe outstanding actions from Due Diligence/ Fiduciary Risk Assessment/ Programme risk matrix

Describe follow up actions from departmental anti-corruption strategies to which Business Case assumptions and risk tolerances stand

## **F: Commercial Considerations**

### **Delivery against planned timeframe. Y/N**

Compare actual progress against the approved timescales in the Business Case. If timescales are off track provide an explanation including what this means for the cost of the programme and any remedial action.

### **Performance of partnership**

How well are formal partnerships/ contracts working  
Are we learning and applying lessons from partner experience  
How could DFID be a more effective partner

### **Asset monitoring and control**

Level of confidence in the management of programme assets, including information any monitoring or spot checks

## **G: Conditionality**

### **Update on Partnership Principles and specific conditions.**

For programmes for where it has been decided (when the programme was approved or at the last Annual Review) to use the PPs for management and monitoring, provide details on:

- a. Were there any concerns about the four Partnership Principles over the past year, including on human rights?
- b. If yes, what were they?
- c. Did you notify the government of our concerns?
- d. If yes, what was the government response? Did it take remedial actions? If yes, explain how.
- e. If No, was disbursement suspended during the review period? Date suspended (dd/mm/yyyy)
- f. What were the consequences?

For all programmes, you should make a judgement on what role, if any, the Partnership Principles should play in the management and monitoring of the programme going forward. This applies even if when the BC was approved for this programme the PPs were not intended to play a role. Your decision may depend on the extent to which the delivery mechanism used by the programme works with the partner government and uses their systems.

## **H: Monitoring and Evaluation**

### **Evidence and evaluation**

Changes in evidence and implications for the programme

Where an evaluation is planned what progress has been made

How is the Theory of Change and the assumptions used in the programme design working out in practice in this programme? Are modifications to the programme design required?

Is there any new evidence available which challenges the programme design or rationale? How does the evidence from the implementation of this programme contribute to the wider evidence base? How is evidence disaggregated by sex and age, and by other variables?

Where an evaluation is planned set out what progress has been made.

### **Monitoring process throughout the review period.**

Direct feedback you have had from stakeholders, including beneficiaries

Monitoring activities throughout review period (field visits, reviews, engagement etc)

The Annual Review process



**Macroeconomic Research in Low-Income Countries  
An IMF/DFID Research Partnership**

**Fifth Year Annual Report to DFID  
(for period April 2016 – March 2017)**

**Prepared by the Staff of the Research (Prakash Loungani and Chris Papageorgiou)  
and Strategy, Policy and Review (Rupa Duttagupta and Lisa Kolovich) Departments**

**June 9, 2017**

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# 1. Program Description

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The “Macroeconomic Research in Low-Income Countries (LICs)” program is a partnership between DFID and the IMF to (a) produce high-quality and policy-relevant research; (b) ensure uptake by designing and executing the research in consultation with policymakers within and outside the IMF; (c) use the IMF’s convening power to expand the network of researchers working on macroeconomic issues relevant to LICs; and (d) achieve all this as cost-effectively as possible.

The topics covered under the program span the major macroeconomic challenges facing LICs:

- (1) Modelling and understanding policy choices
  - a. monetary and exchange rate choices; fiscal policies (public investment; debt sustainability);
- (2) Understanding macro-financial linkages
  - a. capital flows; macro-prudential policies, transmission of macro-financial shocks
- (3) Building resilience
  - a. mitigating impacts of natural disasters and climate change
- (4) Promoting structural change and institutional development
  - a. growth through diversification; structural reforms
- (5) Enhancing inclusion
  - a. policies and income distribution, gender and macroeconomics

Many of these areas risk being neglected because very few macroeconomists conduct research on LICs and very few development economists work on macroeconomic issues (outside of structural/growth issues). Central banks and other macroeconomic institutions in LICs face capacity challenges.

Researchers funded under the program collaborate with IMF staff to produce research papers aimed at policymakers in LICs and in the IMF. We exploit the comparative advantage of the IMF by focusing on macroeconomic issues, and adapt modern analytic tools that have proven useful in developed economies and emerging markets to the needs of LICs. To maximize the policy impact of the project’s outputs, all papers are freely shared with external policy makers through DFID’s research portal and a dedicated project [website](#) maintained by the IMF. To encourage uptake of the research by country authorities and IMF country teams, the papers are supplemented with frameworks and toolkits, presentations at high-level policy conferences, commissioned papers, quarterly e-newsletters to a broad network of LIC researchers and policy makers, and project-financed conferences.

## **Start and End Dates:**

The program began in March 2012 and is in its third phase.

Phase I: March 2012 to March 2015

Phase II: April 2015 to March 2017

Phase III: April 2017 to March 2020

## **Program management:**

As in previous years, the day-to-day management of the program was carried out by the IMF’s Research (RES) and Strategy, Policy and Review (SPR) departments. The managers were Prakash Loungani (RES) and Rupa Duttgupta (SPR). Lisa Kolovich served as the project officer. The management team was lucky to be able to count on the guidance of the previous managers, Andrew Berg (now Deputy Director in the IMF’s Institute for Capacity Development, ICD) and Cathy Pattillo (now Assistant Director in the IMF’s Fiscal Affairs Department, FAD).

**Countries Covered:**

**Table 1**  
**Developing Countries and Their GNI per capita<sup>4</sup>**

Country	2011 GNI per capita (US \$)	Country	2011 GNI per capita (US \$)
Afghanistan	410 <sup>2/</sup>	Maldives	6530
Bangladesh	770	Mali	610
Benin	780	Marshall Islands	3910
Bhutan	2070	Mauritania	1000
Bolivia	2040	Micronesia	2900
Burkina Faso	570	Moldova	1980
Burundi	250	Mongolia	2320
Cambodia	830	Mozambique	470
Cameroon	1210	Myanmar	NA <sup>2/</sup>
Cape Verde	3540	Nepal	540
Central African Republic	470	Nicaragua	1170
Chad	690	Niger	360
Comoros	770	Nigeria	1200
Congo, Rep.	2270	Papua New Guinea	1480
Congo, Dem. Rep.	190	Rwanda	570
Côte d'Ivoire	1100	Samoa	3190
Djibouti	1270 <sup>2/</sup>	São Tomé and Príncipe	1360
Dominica	7090	Senegal	1070
Eritrea	430	Sierra Leone	340
Ethiopia	400	Solomon Islands	1110
Gambia, The	610	Somalia	NA <sup>2/</sup>
Georgia	2860 <sup>3/</sup>	South Sudan	984 <sup>2/</sup>
Ghana	1410	St. Lucia	6680
Grenada	7220	St. Vincent and the Grenadines	6100
Guinea	440	Sudan	1300
Guinea-Bissau	600	Tajikistan	870
Guyana	2900 <sup>2/</sup>	Tanzania	540
Haiti	700	Timor-Leste	2730 <sup>2/</sup>
Honduras	1970	Togo	560
Kenya	820	Tonga	3580
Kiribati	2110	Tuvalu	5010
Kyrgyz Republic	920	Uganda	510
Lao PDR	1130	Uzbekistan	1510
Lesotho	1220	Vanuatu	2870
Liberia	240	Vietnam	1260
Madagascar	430	Yemen	1070
Malawi	340	Zambia	1160
<b>Memorandum Item</b>			
Zimbabwe	640 <sup>4/</sup>		

Source: Fund WEO, World Bank, World Development Indicators, and OP 3.10, Annex C, of July 2012.  
Fund Board decision of April 8, 2013, on Eligibility to Use the Fund's Facilities for Concessional Financing.  
1/ Atlas method.  
2/ Data for 2011 are not available. 2010 data given for Afghanistan, Guyana, Sudan, and 2009 data for Djibouti and South Sudan.  
3/ Georgia graduation will occur at the expiration of the current arrangement in Apr. 2014.  
4/ Zimbabwe is not PRGT-eligible due to its removal from the PRGT-eligibility list by a Board decision in connection with its overdue obligations to the PRGT. It is expected to become PRGT-eligible if the remedial measure were lifted.

<sup>4</sup> The countries included in this table are those that, at the start of this project in 2013, were eligible for IMF lending under the Poverty Reduction and Growth Trust (PRGT) as well as countries that had recently graduated but still faced policy challenges similar to the PRGT-eligible countries.



## 2. Overview of the Year

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### Progress and Achievements:

We had a successful year, reflecting the continued payoff to investments made in earlier years of the program in developing and enhancing models and toolkits. By way of a quick review, the main models and toolkits referred to extensively in this report are :

- 1) *FPAS* (Forecasting and Policy Analysis System): a small macroeconomic model, used extensively under the program to guide central banks in LICs in their monetary policy decisions;
- 2) *DIG* (Debt, Investment, Growth) model: a LIC-specific framework to help make investment decisions that would have a strong growth impact while maintaining debt sustainability;
- 3) *MDAM* (Macroeconomic and Distributional Analysis Model): a model with LIC-specific features used to assess the impact of various policies on the overall economy as well on particular sectors or segments of the population;
- 4) *Diversification toolkit*: a data set and analytic tools to help describe the export structure in LICs and ways to diversify exports.

By the numbers, the fifth year of the program was very productive. In every category, the annual output this year exceeded the annual output of previous years. As a result, we exceeded or met each of the “high” targets of the logframe. Progress was made in all areas and is summarized in this section.

**Working papers continue to be an important output of the program.** We produced 19 papers this year (*output 1.1*). Some of the noteworthy ones include:

- a synthesis of the work on the monetary transmission mechanism in LICs;
- a paper analysing how governments in LICs should allocate scarce resources between projects with a quicker payoff (“roads”) and projects where the payoff takes a long time (“schools”);
- a new data set on trade in services;
- several papers on gender budgeting, the result of a very successful project and conference.

**Several working papers from previous years made their way into journals.** We had 13 publications this year (*output 1.2*). This year we were able to make inroads into the mainstream macroeconomic journals (in particular, the *Journal of Money, Credit and Banking*), which should help enhance the visibility of the research conducted under the program. Some of the work from previous years, along with new papers, was compiled into a book that we hope will serve as a standard reference on monetary policy in Sub-Saharan Africa (SSA). Likewise, several of the gender budgeting papers were compiled into a book. Both books have been accepted for publication (*output 1.3*).

**There was strong uptake of our work by IMF country teams and country authorities.**

- We completed 16 applications with IMF country teams (*output 2.1*), one using FPAS and the others divided about evenly among the three others listed at the start of this section (DIG, MDAM and diversification toolkit).
  - The DIG model is proving very helpful in allowing country teams to estimate the likely impacts of scaling up public expenditure (e.g. in Burkina Faso, Kyrgyz Republic, and the Maldives);
  - With the collapse in commodity prices, we are seeing strong interest in the diversification toolkit as IMF country teams advise governments on how best to move away from being dependent on commodity exports—the cases of uptake were Sierra Leone, Liberia, Senegal and Vanuatu. The toolkit was also used by the Western Hemisphere Department as part of a major project (“cluster report”) on trade integration in the region.
  - We are also now offering customized training and courses in FPAS and MDAM to IMF staff. This is a cost-effective way of reaching many country teams in one swoop and offering them practical hands-on advice in the use of the models and tools.
- There was uptake by country authorities in seven cases (*output 2.2*).
  - Our efforts were geared in large part toward central banks in the SSA region (Ghana, Tanzania, Malawi, Mozambique) to help them cope with a more difficult economic environment. We also offered workshops to engage with a broad group of SSA central banks and deepened our involvement with the East African Community’s Monetary Affairs Committee.
  - We used the DIG model in a productive engagement with the authorities in Vanuatu on their plans to promote resilient infrastructure to withstand natural disasters. We are hopeful that in coming years there will be more examples of this type of engagement with small states that face similar challenges.

**IMF management and senior staff actively participated in discussions on issues facing LICs**, both at conferences organized by the IMF-DFID team and at other venues. There were nine such events over the course of this year (*output 3.1*), with IMF Managing Director Christine Lagarde actively engaged in a few of them.

**The results of the IMF-DFID team’s research were reflected in key IMF papers produced over the year.** The team’s work fed into six such papers (*output 3.2*), including: a major report—the so-called LDIC report—on macroeconomic developments and prospects in low-income developing countries (LIDCs); a Staff Discussion Note on macro-structural policies and income inequality in LIDCs; the IMF’s flagship publications, the World Economic Outlook and SSA Regional Economic Outlook. The LDIC report and the ‘inequality SDN’ were very successful in publicizing the team’s work within and outside the IMF.

**We continued to engage with, and expand the network of LIC researchers** by commissioning seven papers (*output 4.1*) and through the team's active participation in policy conferences (*output 4.2*). In addition to being very actively engaged again this year in the annual conference of the Center for the Study of African Economies (CSAE), we were able these year to present at leading conferences organized by economic associations such as the American Economic Association (AEA) and the Latin American and the Caribbean Economics Association (LACEA). This was part of our effort to make the team's work known outside the community of LIC researchers.

**We produced quarterly newsletters to disseminate the program's results** (*output 4.3*) and, though this is not an explicit logframe output, made a very concerted effort this year to reach broader audiences through speeches, blogs and articles written for the IMF's flagship magazine *Finance & Development* and for the *IMF Research Bulletin*. We were also open to media queries on our work, which resulted in very favourable coverage for our gender budgeting work in *The Economist*.

### **Challenges and Disappointments:**

During this fiscal year, the IMF introduced several changes in its budget tracking and reporting requirements. While the long-term outcome will be greater transparency and accuracy for externally-financed projects, extensive training and cross-departmental consultation were required in the short term, leaving less time for the project and budget officers (some of whom are also researchers) to devote to the outputs themselves.

We also experienced a fair bit of turnover as some researchers hired under the program were absorbed into IMF staff and some research officers headed off to (top) graduate schools. This too is a good long-term development—the pool of 'DFID alumni' within and outside the Fund is growing—but it has added to the short-term costs of managing the program.

There were also some difficulties in keeping the program website up to date given the enormous volume of material that needs to be posted on the IMF's website.

### 3. Logframe Outputs

This research project has four main output categories: (1) produce high quality, policy relevant research on macroeconomic issues affecting LICs; (2) have IMF research products produced under this project used by IMF country teams and partner authorities; (3) strengthen engagement by senior IMF policymakers on issues affecting LICs; (4) strengthen capacity building by expanding the network of LIC researchers.

The research outputs for the five years of the program are shown in Table 2. We have met, and in most cases exceeded, the “High” target for all outputs. In year 5, the annual output in every category exceeded the annual output in previous years.

**Table 2**

Type of Output	Year 1 Outputs	Year 2 Outputs	Year 3 Outputs	Year 4 Outputs	Year 5 Outputs	Total	Output Targets for	
Working Papers	13	17	10	16	19	75	H	68
							M	58
							L	48
Published Papers	1	6	9	8	13	37	H	17
							M	11
							L	8
Books	0	0	0	0	2	2	H	2
							M	1
							L	0
Uptake by IMF Teams	9	12	13	14	16	64	H	38
							M	25
							L	16
Uptake by Authorities	1	2	4	2	7	16	H	11
							M	8
							L	6
High-Level Policy Conferences attended by senior IMF staff	6	4	2	1	9	22	H	11
							M	9
							L	6
Results reflected in IMF board/policy papers	4	4	3	2	6	19	H	11
							M	6
							L	4
Results of papers reflected in IMF board papers	3	3	2	1	2	11	H	7
							M	5
							L	4
Commissioned Papers	0	13	0	0	7	20	H	20
							M	18
							L	10
Toolkits	0	0	1	1	3	5	H	3
							M	2
							L	1
External researchers at high-level policy conferences	6	5	5	15	20	51	H	11
							M	9
							L	6
Outputs disseminated in e-newsletter and public web page	2	4	4	4	4	18	H	18
							M	14
							L	10
Thematic areas of IMF policy influenced and made LIC-specific	3	2	0	0	3	8	H	8
							M	6
							L	5

## Logframe Outputs

### **Output 1: Produce high quality, policy relevant research on macroeconomic issues affecting LICs**

#### **Output 1.1 – Working papers**

We completed 19 working papers this year, making it our most productive year for number of papers, and bringing the total produced over five years to 75 (above the high target of 68).

The papers cover monetary and fiscal policy choices (#1-4 in the list below), macro-financial linkages (#5-7), adapting to climate change (#8), and issues of inclusion and gender equality (#9-17). The last two papers studied the distributional impacts of monetary and financial policies.

1. [VAR meets DSGE: Uncovering the Monetary Transmission Mechanism in Low-Income Countries](#)
2. [Investing in Public Infrastructure: Roads or Schools?](#)
3. [Investing in Electricity, Growth, and Debt Sustainability: The Case of Lesotho](#)
4. [Collect More, Spend Better: Public Investment in Asian Frontier Markets](#)
5. [Capital Account Openness in Low-income Developing Countries: Evidence from a New Database](#)
6. [Evolution of Bilateral Capital Flows to Developing Countries at Intensive and Extensive Margin](#)
7. [World Trade in Services: Evidence from A New Dataset](#)
8. [Investing to Mitigate and Adapt to Climate Change: A Framework Model](#)
9. [Gender Budgeting: Fiscal Context and Current Outcomes](#)
10. [Asia: A Survey of Gender Budgeting Efforts](#)
11. [Caribbean and Pacific Islands: A Survey of Gender Budgeting Efforts](#)
12. [Middle East and Central Asia: A Survey of Gender Budgeting Efforts](#)
13. [Western Hemisphere: A Survey of Gender Budgeting Efforts](#)
14. [Europe: A Survey of Gender Budgeting Efforts](#)
15. [Sub-Saharan Africa: A Survey of Gender Budgeting Efforts](#)
16. [The Influence of Gender Budgeting in Indian States on Gender Inequality and Fiscal Spending](#)
17. [Gender Equality and Economic Diversification](#)
18. [The Effects of Monetary Policy Shocks on Inequality](#)
19. [Macropprudential Policy, Incomplete Information, and Income Inequality: The Case of Low-Income and Developing Countries](#)

Abstracts of the all the papers are provided in Appendix 3.

#### **Output 1.2 – Published Papers**

We published 13 papers this year, a step up from the production in previous years. Heeding recommendations from previous reviews of the program, we tried—with some success this year—to publish in high-quality journals. This year we were also able to branch out into mainstream macroeconomic journals, which is often difficult to do with papers dealing with LICs. Two papers were published in the *Journal of Money, Credit and Banking* and the *Journal of International Money and Finance*, which are both leading field journals for monetary economics. Three others were published in journals that are in the top 25-50 range for economics journals. Of the three book chapters, one was in the *New Palgrave Dictionary of Economics*.

#### *Journal articles*

1. Bilateral Capital Flows to Developing Countries at Intensive and Extensive Margins  
*Journal of Money Credit and Banking*, forthcoming
2. [Joining the Club? Procyclicality of Private Capital In Lower Income Developing Economies](#)  
*Journal of International Money and Finance*
3. [Remittances and Vulnerability in Developing Countries](#)  
*World Bank Economic Review*
4. [Non-FDI Private Capital Inflows in Low-Income Countries: Catching the Wave?](#)  
*IMF Economic Review*
5. [IMF lending and banking crises](#)  
*IMF Economic Review*
6. [Income growth and inequality: The threshold effects of trade and financial openness](#)  
*Economic Modelling*
7. [Fiscal limits in developing countries: A DSGE Approach](#)  
*Journal of Macroeconomics*
8. [From natural resource boom to sustainable economic growth: Lessons from Mongolia](#)  
*International Economics*
9. [Sovereign bonds in developing countries: Drivers of issuance and spreads](#)  
*Review of Development Finance*
10. [Emerging and Developing Economies: Entering a Rough Patch or Protracted Low Gear?](#)  
*Journal of Policy Modeling*

#### *Book chapters*

11. [Financial Liberalization, Inequality and Inclusion in Low-Income Countries](#)  
*Dynamic Modeling and Econometrics in Economics and Finance*
12. Public Sector Investment Efficiency in Developing Economies  
*The New Palgrave Dictionary of Economics*, forthcoming
13. Empowering Women Can Diversify the Economy  
[Women, Work, and Economic Growth: Leveling the Playing Field](#)

### **Output 1.3 – Freely available books**

Two books were accepted for publication.

1. [Monetary Policy in sub-Saharan Africa](#)

This volume that collects both policy- and research-oriented work by IMF staff on this topic in recent years. Its objectives are threefold. First, it provides a comprehensive view of the evolving nature of monetary policy frameworks in sub-Saharan African countries, and the challenges central banks are facing along the way. Second, it reviews the empirical evidence regarding the effects of monetary policy in the region. Third, it presents recent efforts to develop modern macroeconomic models suitable for African countries to clarify some key policy challenges and guide monetary policy decisions and communications. The volume is edited by Andrew Berg and Rafael Portillo. This book has been accepted for publication by Oxford University Press and will likely be available in December 2017.

## 2. Gender Equality and Fiscal Policies

This book offers a summary of lessons learned from our global study of gender budgeting and describes significant gender budgeting efforts in various regions around the world. The IMF's Publications Division has accepted the book and is covering the editing costs. The book will be released in the fall of 2017.

## **Output 2: IMF research product produced under this project used by IMF country teams and partner authorities.**

### **Output 2.1 – Country Applications with IMF Country Teams**

We completed 16 applications with IMF country teams—one based on the FPAS framework; four using the DIG model and related tools to assess effects of investment scaling up on debt sustainability; six using MDAM and related research on inclusion; and five using the diversification toolkit and related research on structural issues.

#### *FPAS framework*

#### 1. Forecasting and Policy Analysis System (FPAS) Customized Training for IMF Country Teams:

The IMF's Institute for Capacity Development (ICD) and the African Department (AFR) are developing a FPAS framework to facilitate AFR country teams' discussions with authorities. As part of this initiative ICD conducted a training program consisting of (i) a series of lectures on the theoretical and operational underpinnings of FPAS, (ii) software training by ITD, and (iii) a series of hands-on practical sessions in modelling and forecasting. The training has been supplemented by a number of hands-on assignments to allow the participants to practice the new skills.

#### *DIG/Investment scaling up/Debt sustainability*

#### 2. [Burkina Faso: Selected Issues Paper](#)

Burkina Faso, like many resource-producing developing countries, needs to use resource revenues efficiently to meet infrastructure needs while maintaining debt sustainability. The 2016 Selected Issues Paper for Burkina Faso applied the Buffie et al. (2012) DIG model to estimate the impact of public investment scaling up and suggest ways in which the increase in spending and borrowing implied by the National Economic and Social Development Plan could be carried out without compromising long-term debt sustainability.



3. [Kyrgyz Republic: Article IV Consultation](#)

The Kyrgyz Republic is one of the pilot countries of the IMF's Infrastructure Policy Support Initiative (IPSI). As part of this initiative, the 2016 Staff Report used the Buffie et al. (2012) DIG model to assess the macroeconomic implications of the Kyrgyz Republic's public infrastructure investment scaling-up plan. A significant part of the public investment is expected to be financed through external concessional loans. The scaling-up plan could modestly support growth in the baseline scenario, without any adverse external shocks, and at current level of public investment efficiency. However, without improvement in public investment efficiency, any adverse shock, for example a further decline in commodity prices that the economy exports can undermine debt sustainability.

4. [Maldives: Article IV Consultation](#)

The 2016 Article IV Staff Report for Maldives applies the Buffie et al. (2012) DIG model to assess growth, fiscal, and debt sustainability implications of infrastructure scaling up. The ambitious infrastructure program is aimed at airport development, which has significant growth potential for this tourism dependent economy. However, IMF staff analysis showed that the impact on public finances will also be significant, requiring large increases in taxes. Inefficiencies in public investment and uncertainties about complementary private sector investment would exacerbate downside risks from the project whereas sound project implementation is an upside risk.

5. [Namibia: Selected Issues](#)

The authorities in Namibia have embraced ambitious fiscal consolidation plans, and the key challenge is to minimize the negative effects on growth. This paper assesses the impact on growth of alternative fiscal consolidation strategies using Buffie et al. (2012) model simulations. Overall, minimizing the negative impact of fiscal consolidation on growth requires combining revenue and expenditure measures, together with fiscal structural reforms.

*MDAM/Inclusion*

6. [Guatemala: Selected Issues Paper](#) and [Guatemala: 2016 Article IV Consultation](#)

Guatemala has high levels of poverty and inequality, with sharp rural-urban and ethnic divides. But low tax revenues constrain the size of the government and the scope to pursue social objectives. In a recent Selected Issues Paper, the team quantified the poverty gap and estimated the effect on growth and redistribution of alternative tax/spending policy combinations. Results suggest that raising revenues through higher and more progressive PIT would be less detrimental to growth and poverty/inequality than the VAT. Redistributing 1 percent of GDP through the existing cash transfer program would reduce extreme poverty by 4 percentage points. Trade-offs on the spending side imply that an increase in both cash transfers and public investment is needed to reduce poverty while also fostering growth.

7. [Honduras: 2016 Article IV Consultation](#)

Progress on inclusive growth reforms has been good and is set to continue. Staff analysis shows that while some measures needed to improve the fiscal situation have been regressive, such as the increase in the VAT rate, the authorities were effective in redistributing additional resources through direct transfers such as the program *Vida Mejor*. Fiscal stabilization helped to lower interest rates, which translated into new business opportunities, especially in the rural sector, thus boosting GDP and decreasing poverty and inequality further. To make further gains, structural reforms to improve labour mobility across sectors will be key.

8. [Bolivia: Article IV Consultation](#)

Bolivia's macroeconomic management of the commodity boom facilitated a decade of strong macroeconomic performance and poverty reduction and the accumulation of sizable policy buffers. Staff analysis suggests that sharply lower commodity prices pose serious challenges to making further progress towards the objectives of eradication of extreme poverty, better access to health and education, and state-led industrialization.

9. [Myanmar: 2016 Article IV Consultation](#) and [Myanmar: Selected Issues](#)

Staff analysis examines the macro and distributional impact of financial sector reform. The results show that financial liberalization i) increases savings, private credit, and growth; ii) reduces nationwide inequality and poverty; and iii) increases access to credit for the rural population and has a positive effect on agricultural output and farm income.

According to the IMF mission chief for Myanmar, "The authorities are highly receptive to the message that financial inclusion and access to credit needs to be expanded and are considering policy changes in line with those discussed in the Selected Issues Paper. The analysis has been used for engagement with some stakeholders as part of overall post-Article IV outreach."

10. [Morocco: Selected Issues Paper](#)

This paper quantifies the effect of gender inequality in Morocco on growth, compared to groups of faster growing countries. It also estimates income losses due to low female labour force participation. The results highlight that closing overall gender gaps would help Morocco close its GDP per capita gap with benchmark countries in other regions by up to 1 percentage point. Simulations also show that gradually closing gender gaps in the labour force participation rate could lead to significant income gains over the long term. Policy recommendations to promote gender equality include investing in secondary education for women and in infrastructure, and reforming gender-discriminatory tax policies and laws.

11. [Course for IMF Country Teams on Assessing Distributional Impacts of Structural Policies](#)

To equip IMF country teams with cutting-edge analytical tools on understanding distributional and output impacts of structural policies, ICD, together with SPR and FAD, launched an Internal Economics Training course on introducing the MDAM (Macro and Distributional Analysis Model) framework which is started to be used in the Fund's country operational work, as the previous examples indicate. Lectures introducing the frontier research on the backbone of MDAM—the heterogeneous agent model (HAM)—were combined with applications of MDAM in a hands-on workshop.

*Diversification/related structural issues/services trade*

12. [Sierra Leone: Selected Issues Paper](#)

The shutdown of iron ore production and tumbling commodity prices have revived the discussion in Sierra Leone on the need to diversify the economy and exports to maintain macroeconomic stability. The paper uses data from the toolkit to describe the state of export diversification in Sierra Leone and formulate policy advice on factors that could boost diversification.

13. [Liberia: Selected Issues Paper](#)

Diversification of Liberia's economy is essential to increase resilience to shocks from commodity price swings, create employment, and provide additional growth drivers. Based on findings of the recent literature on export diversification and growth this note compares Liberia to a benchmark set of

countries, considers ways to diversify the Liberian economy, and discusses initiatives to promote export diversification and growth.

14. [Senegal: Selected Issues Paper](#)

This work investigates export diversification, quality upgrading, and competitiveness in Senegal, comparing its performance with those of fast growing countries in the region and with other countries with similar (or slightly higher) levels of income per capita, but with a more diversified export structure (e.g. Tanzania, Cote d'Ivoire and Vietnam). The analysis shows that Senegal is a relatively diversified economy, both in terms of export products (manufacturing and services) and partners—even though a significant part of exports is concentrated in the region—but with room for quality upgrading, especially in agriculture. Moreover, much of the apparent diversification may be linked to serving captive markets in the region, particularly Mali and, thus overstate the degree of true competitiveness.

15. [Vanuatu: Article IV Consultation](#)

Small states tend to lack data on trade in goods and services, which makes standard assessments of competitiveness difficult to carry out. Using some of the tools developed under the project, the IMF country team analysed sectoral real effective exchange rate (REER) developments for Vanuatu to uncover some price competitiveness challenges.

16. [Launching Export Accelerations in Latin America](#)

The paper, prepared as part of the Western Hemisphere Department's [Cluster Report](#) on Trade Integration in the Latin America and the Caribbean, uses the diversification toolkit to show that diversification helps promote export surges. For LAC countries, this effect occurs through the extensive margin of trade (an increase in the range of products exported).

## Output 2.2 – Uptake by Country Authorities

This year, we coordinated with country authorities on seven projects.

1. [East African Community \(EAC\) Monetary Affairs Committee](#)

The IMF team delivered two presentations at the annual EAC Monetary Affairs Committee meeting in Uganda in July 11-14, 2016, focusing on the role of FPAS as a system underpinning forward-looking monetary policy framework. The EAC governors expressed support for adopting FPAS in their respective central banks, as an integral part of a broader move towards adopting interest rate-based monetary policy frameworks by end-2018. Furthermore, the team has been asked to moderate bi-annual meetings of the EAC FPAS working group, established as a forum for peer-to-peer learning and experience exchange among the modelling and forecasting teams of EAC central banks. The team participated in the November 2016 group's meeting in Zanzibar.

2. [Bank of Ghana: customized training](#)

With the assistance provided under the project, the IMF arranged three customized training missions to help enhance decision-making processes at the Bank of Ghana (BoG), develop a new communication strategy, and strengthen the staff's forecasting and analytical capacities. The missions were organized as a part of the continuing initiative to reinforce the BoG's existing inflation targeting framework. The BoG, with the assistance provided under the project, has been making progress in several dimensions. The forecasting team has been reinforced and has been trained intensively on strengthening the modelling framework behind the macroeconomic projections, including improving the quality of

interactions between the modelers and the area experts, and on putting in place a formal forecasting calendar.

3. Bank of Tanzania: customized training

The team has helped the Tanzanian authorities develop a capacity-building plan so that the Bank of Tanzania (BoT) can transition to a more modern monetary framework. The milestones of the plan include: creating a forecasting team that will be responsible for the development of the FPAS; establishing a regular short- and medium-term forecasting process based on a pre-approved calendar; regular staff presentations of the forecast and policy recommendations to policymakers; and a regular monetary policy report.

4. Bank of Malawi: customized training

The team has helped with a scoping mission to Malawi to launch a medium-term capacity development plan to modernize monetary policy formulation and operations at the Reserve Bank of Malawi (RBM). The plan will (i) modernize monetary policy formulation process through development of a FPAS framework; (ii) enhance monetary operations and market development; and (iii) enhance external communications. The subsequent three missions included intensive hands-on training for RBM staff in modelling and forecasting software and techniques and helped the RBM forecasting team launch the development of a semi-structural quarterly projection model.

5. Bank of Mozambique: customized training

The team has helped Bank of Mozambique (BoM) review forecasting practices, check the performance of the core structural model, and develop additional tools for forward-looking monetary policy analysis and forecasting. The BoM Governor strongly supports the IMF's capacity building project for Mozambique as the Bank transitions to an interest rate-based operational framework.

6. African Training Institute Workshop on Modernizing Monetary Policy Frameworks

As part of roll out of the Board paper "Evolving Monetary Policy Frameworks in Low-Income and Other Developing Countries," mid- and a high-level peer-to-peer workshops were organized for officials from the SSA central banks. Both events were highly praised by the participants. Among other things, there was a consensus between the participants about the need for and important role of structural models in the FPAS; one of the key takeaways was, however, that modelers in the central banks should use the models to help tell forecast stories, rather than applying/trusting them blindly.

7. Vanuatu

IMF Staff employed a refined version of the Debt-Investment-Growth model to provide a framework for promoting resilient infrastructure and adequate maintenance. It was demonstrated that although more expensive, investing in adaptation (either infrastructure such as seawalls, breakwater reefs, that can withstand stronger weather events; or through relocating key infrastructure and conducting disaster mapping) can have positive spillovers. Ensuring the maintenance of critical infrastructure is adequately funded and part of a medium-term expenditure framework is critical (e.g., stable allocations for the Infrastructure Maintenance Fund, and including donor support). The authorities broadly concurred with the assessment of debt sustainability analysis. They noted that the ambitious development plan and reform agenda may cause more pressure on debt sustainability and agreed with the importance of rebuilding fiscal buffers over the medium term. They conveyed their intention of seeking grant financing for new projects and expected the comprehensive tax reform to yield additional revenues.

### **Output 3: IMF strengthens engagement by senior IMF policymakers on issues affecting LICs.**

#### **Output 3.1 – High-level Policy Conferences Attended by IMF Senior Staff**

IMF management and senior staff participated in nine high-level policy events where the project's outputs were featured or discussed.

1. [Low-income and Developing Countries: Conference on Sustainable Economic Development in a Challenging Global Environment](#)

This one-day conference, held during the IMF 2016 Spring Meetings, examined inequality, public investment, and key challenges for development. Panelists included the IMF Managing Director; two IMF Deputy Managing Directors; the Director of the IMF African Department; the Director of the IMF Strategy, Policy, and Review Department; the Deputy Director of the IMF Research Department; as well as outside experts such as Abhijit Banerjee, Paul Collier, Benno Ndulu, Ngozi Okonjo-Iweala, Alamine Ousmane Mey and Larry Summers.

2. [Conference on Gender and Macroeconomics](#)

A conference on Gender and Macroeconomics was held on March 23-24, 2017 at the IMF Headquarters in Washington, DC. The IMF Managing Director and the IMF Economic Counsellor and Director of the Research Department offered opening remarks. The conference provided a forum for discussing innovative empirical and theoretical research on gender and macroeconomics and policy implications, with specific application to the challenges of low-income and developing countries. Topics included female labour force participation, financial inclusion, trade diversification, firm performance, intra-household choices, public investment, and macroeconomic outcomes.

3. [Third Annual Workshop on Macroeconomic Policy and Income Inequality](#)

The Third Workshop on Macroeconomic Policy and Income Inequality in Developing Countries was held at IMF headquarters on February 9-10, 2017. The IMF Economic Counsellor and Director of the Research Department joined academics and policy experts participated in two days of presentations and discussions on issues such as: causes and consequences of resource misallocation across sectors, the link between international trade and income inequality, and the importance of energy investment in economic growth.

4. [Conference on Fiscal Policies and Gender Equality](#)

The IMF hosted a one-day conference on Fiscal Policies and Gender Equality on November 7, 2016. Approximately 225 attendees from IMF/World Bank, NGOs, think tanks, universities, consulting firms, and UN agencies joined the opening session, which featured a panel discussion among Ms. Christine Lagarde, Managing Director of the IMF, Ms. Phumzile Mlambo-Ngcuka, Executive Director of UN Women, Ms. Laura Tyson, Professor of Economics, University of California-Berkeley and former chair of the White House Council of Economic Advisors, and Ms. Julie Delahanty, Executive Director, Oxfam Canada. Ms. Diane Elson, Professor Emerita, University of Essex and UK Women's Budget Group, offered the keynote address. Various media outlets covered the conference including [The New York Times](#), [Yahoo!](#), [News Nation](#), [Plant](#), [The China Post](#), [The Daily Sabah](#), [The Hamilton Spectator](#), and [The New Jersey Herald](#).

5. [Conference on Global Labour Markets](#)

A conference on global labour markets was held on September 1-2, 2016. The IMF Deputy Managing Director Tao Zhang provided the opening remarks for the conference, which featured work on the

relationship between jobs and growth in low-income countries; presentations on the role of the private sector in meeting sustainable development goals, including the goal of full and productive employment (SDG8); and discussions on the design of labour market institutions in low-income countries.

6. [IMF Annual Meetings Seminar on Infrastructure in Developing Countries](#)

As part of the 2016 Annual Meetings, the team organized a seminar “Toward Better Infrastructure in Developing Countries.” Discussants included Mr. Mitsuhiro Furusawa, Deputy Managing Director of the IMF, Ms. Kemi Adeosun, Minister of Finance of Nigeria, Mr. Anders Borg, Chair of the World Economic Forum’s Global Financial System Initiative, Mr. Aldo Caliarì, Director of the Rethinking Bretton Woods Project at the Center of Concern, Mr. Paul Collier, Professor of Economic and Public Policy at the Blavatnik School of Government at the University of Oxford, and Mr. Jonathan Taylor, Vice President and member of the Management Committee of the European Investment Bank. The panel discussed the importance of addressing infrastructure gaps in developing countries, what has worked in countries that have successfully scaled up, what challenges remain, and how policy can play a role.

7. [UN High Level Dialogue on Challenges Facing Commodity-Dependent LICs](#)

Prakash Loungani, IMF Chief of Development Macroeconomics (and co-manager of the IMF-DFID program) participated in this UN conference and gave a [presentation](#) on fiscal and structural challenges facing commodity-dependent developing economies. The diversification toolkit developed under the IMF-DFID project was used to illustrate possible growth strategies for commodity-dependent economies. The presentation also discussed the near-term adjustment needed in some commodity-dependent LICs. Using the DIGNAR model developed under the project, the likely counter-productive effects of making the adjustment solely through sharp cuts in public investment were illustrated and compared with other options for fiscal adjustment.

8. [UN Session on Challenges for Least Developed Countries](#)

Rupa Duttagupta, IMF Chief of LIC Strategy Unit (and co-manager of the IMF-DFID program) presented the report [Macroeconomic Developments and Prospects in Low-Income Developing Countries - 2016](#) at a session to officials from UN member states and UN institutions and civil society. The session highlighted the challenges faced by the Least Developed Countries and in particular those that are commodity-dependent in their exports. The Office of the High Representative of Least Developed Countries, Landlocked Developing Countries, and Small Island Developing States organized the January 2017 session.

9. [International Labour Organization session on Fiscal and Structural Challenges facing LICs](#)

Prakash Loungani, IMF Chief of Development Macroeconomics (and co-manager of the IMF-DFID program) participated in this ILO session and used the team’s research and toolkits to discuss fiscal and structural challenges facing commodity-dependent developing economies. The session had officials from a dozen LIC, including from labour ministries.

### **Output 3.2 – Results of papers reflected in IMF Board discussions and papers**

The results of our research have been reflected in six major IMF reports this year—two Board papers (papers discussed by the IMF Executive Board), one Staff Discussion Note, twice in the flagship World Economic Outlook, and the Sub-Saharan Africa Regional Economic Outlook.

*Papers discussed by the IMF Executive Board*



1. [Macroeconomic Developments and Prospects in Low-Income Developing Countries - 2016](#)

The report documents an incomplete adjustment to the new world of “lower for long” commodity prices, with many commodity exporters still far from a sustainable macroeconomic trajectory. Policy actions needed to manage risks and vulnerabilities from financial sector stresses and medium-term fiscal risks are discussed. The paper also looks at how infrastructure investment can be accelerated in LIDCs, given that weaknesses in public infrastructure are widely seen as a key constraint on medium-term potential growth. Parts of the report relied on research produced by the IMF-DFID project and some members of the team helped with the drafting of the report.

2. [Small States' Resilience to Natural Disasters and Climate Change - Role for the IMF](#)

Small developing states are disproportionately vulnerable to natural disasters. On average, the annual cost of disasters for small states is nearly 2 percent of GDP—more than four times that for larger countries. About 9 percent of disasters in small states involve damage of more than 30 percent of GDP, compared to less than 1 percent for larger states. This greater exposure to disasters results in lower investment, lower GDP per capita, higher poverty, and a more volatile revenue base. Members of the IMF-DFID team participated in the working groups leading up to the formulation of the report and provided an annex for the report itself on modelling the impacts of natural disasters on small states and the impacts of alternate policy actions.

*Staff Discussion Note (SDN)*

3. [Macro-Structural Policies and Income Inequality in Low-Income Developing Countries](#)

Despite sustained economic growth and rapid poverty reductions, income inequality remains stubbornly high in many low-income developing countries. This pattern is a concern as high levels of inequality can impair the sustainability of growth and macroeconomic stability, thereby also limiting countries’ ability to reach the Sustainable Development Goals. This underscores the importance of understanding how policies aimed at boosting economic growth affect income inequality. Using empirical and modeling techniques, the note confirms that macro-structural policies aimed at raising growth payoffs in low-income developing countries can have important distributional consequences, with the impact dependent on both the design of reforms and on country-specific economic characteristics. While there is no one-size-fits-all recipe, the note explores how governments can address adverse distributional consequences of reforms by designing reform packages to make pro-growth policies also more inclusive. Following new procedures at the IMF for SDNs, this paper was discussed by the IMF’s Executive Board in an informal seminar. In addition, the IMF Managing Director penned a [blog](#) to highlight the findings and policy recommendations of the paper and also discussed the paper as part of her [speech](#) in Uganda.

*WEO/REO*

4. WEO [Box 1.2](#). “Macroeconomic Developments and Outlook in Low-Income Developing Countries: The Role of External Factors” draws on the team’s research to parse out the external factors behind the slowdown in low-income developing countries: sharply lower commodity prices, lower growth in trading partners, and tighter financing conditions.
5. WEO [Box 2.1](#). “Capital Flows to Low Income Developing Countries” draws on the team’s research to analyse the experience with capital flows in LIDCs in the period after the global financial crisis and highlights important differences in the experience from other emerging market economies.
6. REO [Box 1.1](#). “Reaping the Benefits from Export Diversification”

Drawing on the diversification work of the team, the October 2016 Sub-Saharan Africa Regional Economic Outlook examined the benefits of export diversification. Many economies in the sub-Saharan Africa region still reel from the commodity price slump; diversification is emerging as an important channel to foster growth and increase resilience. Supporting infrastructure upgrades, price competitiveness and trade openness, as well as equal opportunities, appear to be powerful levers to enable export diversification.

## **Output 4: IMF strengthens capacity building by expanding the network of LIC researchers.**

### **Output 4.1 – Commissioned Papers**

We commissioned seven papers this year. The first four were part of the gender budgeting project. The team worked with the authors to help them revise the papers for inclusion in the book that is being published by the IMF on the topic. The next two are on labour markets on LICs. Initial versions of these papers were presented at the Global Labour Markets conference, and the team will help the authors address the feedback received so that the papers can be published in the special issue of *Open Economies Review*. The last paper set out the framework that will be developed further to address how LICs should mitigate and adapt to climate change.

1. [Asia: A Survey of Gender Budgeting Efforts](#)
2. [Caribbean and Pacific Islands: A Survey of Gender Budgeting Efforts](#)
3. [Western Hemisphere: A Survey of Gender Budgeting Efforts](#)
4. [Europe: A Survey of Gender Budgeting Efforts](#)
5. [Policy Lessons from Okun's Law for African Countries](#)
6. [Okun's Law: Unfit for Low-Income Countries?](#)
7. [Investing to Mitigate and Adapt to Climate Change: A Framework Model](#)

### **Output 4.1.1 – Toolkits**

We released three toolkits this year.

1. [International Trade in Service and the Comparative Advantage of Nations, 2017](#): The dataset provides the first compilation of detailed historical and new data on world trade in services. It is a useful resource for researchers, policymakers, and businesses for decisions in macroeconomic competitiveness and understanding how technological forces affect rapid resource reallocation in specific sectors.
2. [IMF Gender Portal](#): The team has conducted the first-ever global review of policymakers' use of tax and spending policies to promote gender equality and released an online database toolkit of gender equality indicators worldwide. The project outlines the economic rationale for gender budgeting—the use of fiscal policy and administration to promote gender equality and girls' and women's development. A toolkit highlights successful gender budgeting practices and summarizes key country case studies, drawing from six regional country surveys. The online toolkit also includes two time-consistent indices of gender equality, spanning 1990–2013.
3. **Distributional Incidence Analysis**: A user-friendly toolkit has been developed to conduct incidence analysis of fuel price subsidy reform (a manual was also published in October 2016). The tool provides



estimates of the direct and indirect welfare impacts of an increase in fuel prices, and the distribution of these impacts across household income groups. (The direct impact arises when households purchase fuel products for cooking, heating, lighting, and private transport. The indirect impact arises when households purchase goods and services that are produced using fuel products.) The EXCEL-based tool has been used by country teams and in IMF technical assistance work (e.g. Mali).

## **Output 4.2 – Attendance of External Researchers at High-Level Policy Conferences**

Our team made 20 presentations at high-level policy conferences. In addition to conferences devoted to specific topics (#1-5 in the list below), the team presented at gender budgeting workshops (#6-7) and at conferences organized by leading economics associations (#8-11). We continued to play an important role in the Center for the Study of African Economies (CSAE) annual conference (#12-20).

1. [Gaidar Forum](#), Moscow, January 2017
2. [Navarra Center for International Development Conference](#), Madrid, June 2016 (keynote speech by Chris Papageorgiou and presentation by Stefania Fabrizio)
3. The [Global Challenges](#) workshop, organized by the University of Milan, Bocconi University, and Catholic University of Milan
4. The [Conference on Financial Intermediation in Emerging Markets](#), Cape Town, December 2016
5. [5<sup>th</sup> Emerging Scholars in Banking and Finance Conference](#), Cass Business School, December 2016
6. Center of Excellence in Finance, [Gender Responsive Budgeting](#), Ljubljana, April 2016
7. [Innovations in Gender Responsive Budgeting: Sharing Experiences from the Asia Pacific](#), Organized by UN Women and the National Institute of Financial Management, Government of India, Jaipur, India, December 2016
8. [American Economic Association Meetings](#), January 2017
9. [Latin American and the Caribbean Economics Association](#), November 2016
10. [Midwest Macroeconomics Meetings](#) - Federal Reserve Bank of Kansas City, November 2016
11. [Southern Economics Association](#), Washington DC, November 2016

### **2017 CSAE Conference ([program](#)):**

12. [Investing in Public Infrastructure: Roads or Schools](#)
13. [Non-FDI Capital Inflows in Low-Income Countries: Catching the Wave?](#)
14. [Stylized Facts about Business Cycles in Sub-Saharan Africa](#)

15. [Emissions and Growth: Who is to blame and how to improve?](#)
16. [Room for Discretion? The Political Economy of the World Bank-IMF Debt Sustainability Analysis](#)
17. [The Macroeconomic and Distributional Effects of Public Investment in Developing Economies](#)
18. [Global Value Chain and Foreign Investors: An empirical analysis on Sub Saharan Africa and Vietnam](#)
19. [Macprudential Policy, Incomplete Information and Inequality: The case of Low Income and Developing Countries](#)
20. [Commodity Prices and Bank Lending in Low-Income Countries](#)

### **Output 4.3 – Results disseminated in e-newsletters**

Each quarter, we send out an e-newsletter that spotlights working papers, conferences, and other activities we have completed over the last three months.

1. [May 2016 Newsletter](#)
2. [August 2016 Newsletter](#)
3. [November 2016 Newsletter](#)
4. [February 2017 Newsletter](#)

In addition to the newsletters, the research output of the project was disseminated through speeches and blogs; Finance & Development, the IMF's flagship magazine for general readers; and the IMF Research Bulletin, which targets a more professional audience. We received media coverage and our work was featured extensively by the IMF on both its external website and Twitter feed and on its internal (intranet) website—the latter are not publicly available but help to publicize the team's research among IMF economists and help to bring in requests from country teams.

Though these activities are not part of the current logframe, we summarize them here as previous reviews of the project and our ongoing discussions with DFID staff have highlighted the importance of disseminating the output to various audiences.

#### *Speeches and blogs*

1. The Staff Discussion Note (SDN) on inequality in LICs was publicized through various outlets.
  - a. The SDN was launched by the IMF Managing Director during a speech [in Uganda](#) (She said: "New research that we are releasing today focuses on the relationship between inequality and reforms in key areas such as fiscal policy, the financial sector policy and agriculture. Reducing inequality requires several things: good jobs for young people, a strong emphasis on education and health care, and assistance to the poor, including a social safety net.") The work was also highlighted in a One World [blog](#).

There were also three blogs (one by the IMF Managing Director and two short thematic ones) using analysis from this SDN:

[The Fruits of Growth: Economic Reforms and Lower Inequality](#)

[Chart of the Week: Growth and Inequality](#)

[Chart of the Week: Access to Banking Services](#)

2. IMF Deputy Managing Director Tao Zhang, who has oversight over the IMF's engagement with LICs, wrote a blog on infrastructure in LICs, drawing in part on the team's research: ([Roads to Stronger Growth in Low-Income Countries](#)).
3. The co-manager of the team, Prakash Loungani, wrote two blogs drawing on aspects of the team's work to explain the IMF's work on inclusion in non-technical terms.
  - a. The blog "[Inclusive Growth and the IMF](#)" noted that a common theme of the IMF's new initiatives—jobs, equity, governance, financial access and climate change, many of which are also part of the IMF-DFID project—is a focus on inclusion.
  - b. The blog "[The IMF's Work on Inequality: Bridging Research and Reality](#)" draws extensively on analyses of inequality conducted by the team (e.g Bolivia)

#### *Articles in Finance & Development*

4. An [article](#) explaining the team's IMF Working Paper "Macroeconomic Dimensions of Public-Private Partnerships" in non-technical terms was featured in the September 2016 issue.
5. The implications of the robot revolution for equality were previewed in an [article](#) in the September 2016 issue, drawing on ongoing research by Andy Berg, Ed Buffie and Felipe Zanna—veteran members of the IMF-DFID team.

#### *Articles in IMF Research Bulletin*

6. [Seven Questions on Estimating Monetary Transmission Mechanism in Low-Income Countries](#)  
The important research done under the IMF-DFID project by Chris Adam, Andy Berg and others was summarized in this article.
7. [Does Growth Create Jobs? Evidence for Advanced and Developing Economies](#)  
This article summarized the team's work comparing the link between jobs and growth in advanced economies with that in developing economies (emerging markets and LICs). The article makes the important point that while this link is weaker, on average, in developing countries than in advanced ones, there is divergence within the group of developing countries.
8. [The Future Wealth of Nations: World Trade in Services](#)  
This article introduces the new data set on services trade put together by the IMF-DFID team. It notes that services exports from developing countries have grown tenfold since 1990 and at twice the rate of services exports from advanced economies; hence, developing countries' share has increased from 3 percent in 1970 to over 20 percent in 2014. This increase is not just due to higher exports of traditional services, but is also due to modern technology-enabled services as well.

9. Publicity for gender budgeting research:

- a. *The Economist* featured [two articles](#) on the importance of gender budgeting after interviewing Janet Stotsky, Diane Elson, and Lisa Kolovich. There was also a [blog](#) in March from *The Economist* noting how the IMF wants to incorporate gender budgeting into its advice. Media in [India](#), [Jamaica](#), [Nigeria](#), the [Philippines](#), and [Tanzania](#) reported on the results of the study.
- b. The team presented the main findings of the gender budgeting global survey during an IMF press [conference](#). The IMF [twitter feed](#) has promoted the two gender conferences along with the gender budgeting toolkit launch (#IMFGENDER). The project and results are also featured prominently on the IMF Gender [website](#). A March 2017 IMF News [article](#) featured the team's work on gender inequality and gender budgeting in Morocco.

10. UN TV: Stefania Fabrizio was interviewed by Alex Wang, Secretary General of Youth Think Center, on how domestic macroeconomic policies can be made palatable from both an economic and distributional perspective. The interview was broadcast on [UN web TV](#).

11. IMF Analytical Corner: Sandra Lizarazo and Marina Mendes-Tavares presented at the IMF [Analytical Corner](#), a TED-style talk, at the IMF Spring Meetings. The presentation shed light on how core macroeconomic and structural policies affect growth and income distribution in developing countries and the channels through which growth-equity tradeoffs tend to be generated.

12. Two-day Workshop on Overview of the Work at the Fund:

As part of a workshop in Kenya in March 2017 to provide African civil society leaders an overview of the work of the Fund, the team made a well-received presentation on "Macro-structural policies and Income Inequality in Low-Income Developing Countries" (via video conference).

## 4. Outputs: Additional Information

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Nothing more to report at this time.

## 5. Uptake/Engagement with Beneficiaries

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By design, this project continually aims to produce high quality research that is applicable to LICs and usable by country authorities, academics, and IMF staff. Each output captured in the logframe reflects this overarching goal. Sections 2, 3, and 6 of this report address our uptake and engagement with beneficiaries in greater detail.

## 6. Outcomes and Impacts

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While this report shows that substantial progress was made across all the major output areas, a few stand out as worthy of special mention.

**First, uptake by IMF country teams remained at a high level.** The work on income inequality was used extensively in the IMF's operational work. Over the two phases of the program, the team has built a micro-founded model to understand the distributional consequences of macroeconomic policies in an economy with features typical of a low-income country (such as high levels of informality, limited labour mobility, and low productivity in some sectors). This year the model was applied to several country cases and results from the model provided a basis for discussing inequality issues during the IMF's regular Article IV Consultations with its member countries. The work on diversification and structural transformation also continues to be in demand. The diversification toolkit has been used quite extensively by IMF country teams in Article IV consultations with authorities. The toolkit has helped country teams enhance discussions with country authorities on export diversification and quality upgrading as part of the development strategy for LICs, particularly for commodity exporters and small states that are actively seeking new sources of economic activity. In response to demand from users, we extended the toolkit to add data on trade in services and supplemented the export diversification indices with indices of import diversification. The high degree of uptake is testament to the quality of the research and its relevance to policy analysis. Siddharth Tiwari, Director, IMF Strategy, Policy, and Review Department notes the impact of the income inequality work:

"The project's model-based framework on income inequality has provided an excellent platform to analyze the impact of commodity price booms, agricultural reforms, fiscal policy and financial liberalization in several low-income and developing countries."

**Second, there was strong engagement by senior IMF policymakers with the team's work.** This is particularly evident in the case of the work on gender equality. The team's global survey of gender budgeting efforts formed the basis for one of the five [commitments](#) towards closing the gender gap offered by the IMF Managing Director as part of the UN High Level Panel on Women's Economic Empowerment. At the March 2017 Conference on Gender and Macroeconomics, the IMF Managing Director and the IMF Economic Counsellor and Research Director Maurice Obstfeld both remarked on the macro-criticality of gender equality—see images from IMF's Twitter account on next page for examples. The Managing Director announced that she would push for IMF country programs to include gender-related benchmarks. This has thus been a banner year for our work on income inequality and gender issues, as summarized in Box 1 below.<sup>5</sup> The work on diversification also drew high-level support—the team was invited to accompany IMF management to make a presentation at the Gaidar Forum in Moscow.

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<sup>5</sup> In an interesting twist, some of the team's research on LICs has influenced work done on advanced economies and emerging markets. For instance, the team's research fed into a recent [IMF Staff Discussion Note](#), prepared at the request of the Italian Presidency of the G7, on how gender-budgeting can contribute to gender equality in G7 economies. Likewise, Mr. Tiwari noted that the inequality model has had "broader applications beyond low income countries. For example, IMF economists are drawing on the model to analyze the distributional implications of tax policy changes in the United States."



**Third, we were able to continue to integrate technical assistance and training into the project.** As described in the report, the team has continued working closely with the central banks in sub-Saharan Africa. Under funding from the IMF Regional Technical Assistance Centres (RTACs) and DFID, the team provided customized training (CT) and technical assistance in modernizing monetary policy frameworks to the central banks of Ghana, Mozambique, Malawi, and the East African Community (EAC) Partner States. The substantive nature of the engagement is described in Box 2 below.

**Fourth, the program continues to increase its profile both inside and outside the IMF,** in part due to the ability to attract outside researchers. In addition to continuing our engagement with researchers such as Christopher Adam (University of Oxford) and Edward Buffie (Indiana University), who have been involved with the project from the start, this year we brought in: Laurence Ball (Johns Hopkins University; a leading macroeconomist known for his work on advanced countries, who has now been working with the team on developing country issues); Willy Semmler (New School for Social Research; a macroeconomist who is a leading expert on climate change); Karim El Aynaoui (OCP Policy Center; a former central banker who manages a think tank that focuses on SSA issues); Markus Eberhardt (University of Nottingham, who is working on banking sector issues in LICs); and Miguel Sarmiento (Banco de Colombia, working on cross-border bank lending to low-income countries). We have also worked to enhance collaboration with outside institutions. For example, following a presentation on our work on inequality and income distribution, representatives from the OECD (Washington office) noted that they appreciated the research and saw the presentation as an important step in strengthening the dialogue between the two institutions. Likewise, following another presentation, Oxfam staff praised the work and offered ideas and support to expand research on the topic. Our team working on gender issues in low-income and developing countries has been in regular contact with representatives from the World Bank, UN Women, and the International

Labour Organization, as well as more recent discussions with the International Development Research Council in Canada.

**Fifth, there was a pick-up in disseminating the project's outputs both to specialized audiences** (through external presentations at high-level conferences) and broader audiences (through writing for magazines, bulletins and blogs). The latter is a response to the recommendations in previous reviews of the program—and guidance from DFID staff over the past year—that the research be made accessible through more non-technical material. Though this is not an explicit output under the present logframe, we produced over a dozen non-technical articles this year that drew on the team's work, including a few that were penned by IMF management. The team working on inequality also presented their work at the IMF's Spring Meetings in a TED-style [talk](#) and at a conference for civil society organizations.

IMF management has been highly supportive of the program, with IMF Managing Director Christine Lagarde showcasing some of the research in her speeches as noted in this report. Tao Zhang, IMF Deputy Managing Director, has praised the work and its impact:

"The IMF-DFID program [on macroeconomic research in LICs] has enriched the Fund's engagement with low-income and developing countries, allowing us to scale up our work and outreach. The project's topics—economic diversification, public investment, monetary policy, macro-financial issues and income and gender equality—reflect the range of the Fund's own work."





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## Box 2: Engagement with SSA Central Banks

- There were two missions this year to enhance monetary policy formulation and communication at the Bank of Ghana (BOG).
  - The July 2016 mission's main objective was to support capacity building in the newly-established Department of Communications at the BOG. The mission assisted in formally establishing a strategic communication function in line with the IT framework requirements and in assisting the BOG's new Department of Communications in submitting a comprehensive communications strategy. Thus, the team worked to increasing the scope and frequency of public pronouncements by the Governor and other top BOG officials, in line with the new strategy, which would give the central bank a more prominent voice in the public debate on the economy in Ghana. This is particularly important to help advance the BOG's inflation-fighting policy efforts, with inflation lingering at levels twice as high as the central bank's medium-term target.
  - The September 2016 mission's main tasks were to 1) train newly hired staff in modeling and forecasting techniques and continue the learning process with staff who had interacted with previous missions; 2) review the simulations and presentations supporting the September 2016 MPC; 3) review technical aspects of the projection, alternative scenarios and their economic interpretation; and 4) assist with skill specialization within the forecasting team. The mission brought new staff of the Economics Department of the BOG up to speed on the modeling and forecasting aspects of FPAS and provided additional training to the experienced modelers in the Economics Department. Through this training, the experienced modelers gained a deeper understanding of the model, including how to resolve complex issues with the model and forecast.
- In June 2016, a scoping mission to Malawi launched a medium-term capacity development project to enhance monetary policy formulation and operations at the Reserve Bank of Malawi (RBM). Three follow-up CT missions have visited the RBM since, and RBM staff have completed a series of off-site training assignments.
- In August 2016, the CT mission team helped the Tanzanian authorities develop a two-year plan for capacity building for their FPAS, which would help the Bank of Tanzania (BoT) transition from a quantity-based policy operational framework to a price-based one. Two missions under the developed work plan have taken place since.
- Two CT missions helped Bank of Mozambique review forecasting practices, check the performance of the core structural model, and develop additional tools for forward-looking monetary policy analysis and forecasting.
- The individual country capacity development work has been further supported by regional initiatives. The team delivered two presentations at the annual EAC Monetary Affairs Committee (MAC) meeting in Uganda in July focusing on the role of FPAS as a system underpinning forward-looking monetary policy framework. Additionally, as part of the strategy to roll out the Board paper "Evolving Monetary Policy Frameworks in Low-Income and Other Developing Countries," a mid-level and a high-level peer-to-peer workshops were organized by the IMF and the African Training Institute (ATI) in November 2016 for officials from SSA central banks. Furthermore, as part of customized training on the regional level, the IMF team moderated a meeting of the EAC FPAS working group in November 2016 in Zanzibar. The EAC FPAS working group has been created as a forum for peer-to-peer learning and experience exchange among the EAC central banks.
- The Africa Training Institute, together with IMF and DFID financial support, organized a high-level peer-exchange on seven principles for an effective monetary policy, as identified in a recent IMF study on Evolving Monetary Policy Frameworks in Low-and Lower-Middle Income Countries. Central bankers from selected sub-Saharan

## 7. Costs, Value for Money, and Management

The approved budget for the first five years of this project is US\$15.1 million.

Appendix 2 provides the formal financial reporting of the project, with a financial statement and projects generated by the IMF's financial systems. As of April 2017, \$13.3 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.

The following table provides an indicative breakdown of spending over five years of the project:

**Table 4**  
**Project Expenditures in Years 1-5**

<b>Activity</b>	<b>Approved Budget</b>	<b>Expenses /Drawdowns</b>	<b>Remaining Commitments</b>
Contractuals	6,613,470	5,872,923	740,547
Visiting Scholars	2,317,771	2,157,959	159,812
Travel and Conferences	2,919,125	2,231,905	687,220
Contingency	-	-	-
IMF Staff	-	-	-
IMF Staff Backstopping/Uptake	2,081,587	2,001,746	79,841
Project Management	212,530	136,048	76,482
Subtotal	14,144,483	12,400,580	1,743,903
TTF Management Fee (7%)	990,114	868,041	122,073
<b>Total</b>	<b>15,134,597</b>	<b>13,268,621</b>	<b>1,865,976</b>

We do not foresee any changes in cost structures due to exchange rates.

**Value for Money:** We believe that this project is highly cost effective for several reasons. We strictly follow all Fund guidelines for hiring, travel, and conferences. All contractual hires undergo a competitive process. Outputs are produced under firm timeframes and must meet Fund requirements for publication.

Table 5 shows the cost per paper over the first five years of the project. We estimate that staff, contractual employees, and visiting scholars spend 75 percent of their time on research papers, while the remaining 25 percent is devoted to country applications work. The total staff, contractual, and visiting scholar cost (see Table 5) is thus split between papers and applications. The cost per working paper is about \$101,000 (about £80,000), which compares favourably with the DFID benchmark of £150,000 per paper. The cost per published paper is \$206,000 (about £160,000); in assessing this cost, it must be noted that many of our publications have been in high-quality peer-reviewed journals such as the *Journal of Money, Credit and Banking*, *Journal of Development Economics*, the *Journal of International Money and Finance*, the *World Bank Economic Review* and the *IMF Economic Review*.

**Table 5**  
**Cost per Working and Published Paper**

Total Staff/Contractual/VS Costs	\$10,168,675
Research Paper Costs	\$7,626,506
Country Applications Costs	\$2,542,169
Working Papers Produced	75
Cost Per Working Paper	\$101,687
Published Papers Produced	37
Cost per Published Paper	\$206,122

Direct project management costs represented approximately one percent of our total budget; if we include the Trust Fund management fee, program management costs are around eight percent. This means that the vast majority of the funds available to this project were spent on producing high quality research.

## 8. Work Plan and Timetable

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Please see phase 3 proposal.

## 9. Risk

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The overall risk for this project remains low.

## 10. Monitoring and Evaluation

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**Monitoring:** IMF reports to DFID annually regarding the outputs included in the logframe. In addition to this formal reporting requirement, we provide quarterly updates to our [website](#) so that DFID and the general public have up-to-date information on our research and progress. The team sends out quarterly e-newsletters that reach an audience of more than 1500 academics, policymakers, central bank staff, and government representatives, among others. These e-newsletters are posted on the project website. We also upload all publicly available working and published papers to the R4D portal on the DFID website so that DFID staff members will be able to easily search and retrieve all of our outputs. To further ensure public access to all outputs produced through the grant, we provide “gold access” to journal publications. When deemed necessary by IMF and DFID project members, we conduct video conference calls to discuss the project.

**Evaluation:** No budget for an external evaluation was included in the project budget.

## 11. Further Information

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Nothing to add at this time.

## Appendix 1: Logframe

IMPACT	Impact Indicator 1		Baseline	Milestone 1	Target (date)	
Better macroeconomic policymaking in LICs leading to faster economic growth, job creation and poverty reduction.	Proportion of people living in extreme poverty in LICS	Planned	2015	2016	2017	
		Achieved				
			Source			
	Impact Indicator 2		Baseline	Milestone 1	Target (date)	
	Increase in employment to population ratio in LICs	Planned	2015	2016	2017	
		Achieved				
			Source			
OUTCOME	Outcome Indicator 0		Baseline	Milestone 1	Target (date)	Assumptions
Deeper understanding of, and better engagement by, IMF policymakers on LIC-specific macroeconomic issues, leading to improved policymaking in specific thematic areas.	Improved IMF policymaking and integration of LIC-specifics in project thematic areas.	Planned	Six thematic areas influenced by March 2015. H (6) M (4) L (3)	By March 2016: H (7) M (5) L (3)	Eight thematic areas influenced by March 2017. H (8) M (6) L (5)	
		Achieved	5	5	8	
			Source			
			IMF			
INPUTS (£)	£5,470,000					
INPUTS (HR)	DFID (FTEs)					

OUTPUT 1	Output Indicator 1.1		Baseline	Milestone 1	Target (date)	Assumptions		
High quality, policy relevant research on macroeconomic issues affecting LICs produced.	Number of priority research papers produced	Planned	36 priority papers produced by March 2015. H (36 papers) M (24 papers) L (12 papers)	By March 2016: H (52) M (45) L (40)	68 working papers produced by March 2017: H (68) M (58) L (48)	1) No further escalation of the economic crisis, in the eurozone or elsewhere, such that IMF staff can devote time to the project as committed. 2) IMF are able to identify high-quality 3) Academic researchers are able to deliver contracted inputs consistent with timeframes envisaged for the project. 4) Counterpart inputs materialise as anticipated.		
		Achieved	40	56	75			
		Source						
		IMF						
	Output Indicator 1.2		Baseline	Milestone 1	Target (date)			
	Number of research papers accepted for publication in top journals	Planned	Six papers published by March 2015. H (6) M (3) L (1)	By March 2016: H (9) M (4) L (3)	17 papers published by March 2017. H (17) M (11) L (8)			
		Achieved	16	24	37			
	Output Indicator 1.3		Baseline	Milestone 1	Target (date)			
	Number of freely available books published.	Planned	N/A	By March 2016: H (0) M (0) L (0)	Two books published by March 2017. H (2) M (1) L (0)			
		Achieved	0	0	2			
		Source						
		IMF						
IMPACT WEIGHTING								
30%								
INPUTS (£)	DFID (£)		Govt (£)	Other (£)	DFID SHARE			

INPUTS (HR)	DFID (FTEs)		

OUTPUT 2	Output Indicator 2.1		Baseline	Milestone 1	Target (date)	Assumptions
IMF research products (policy analysis, practical and operational tools and frameworks) produced under this project used by IMF country teams and partner authorities.	Application and use of tools and frameworks by country teams.	Planned	Application by 18 country teams by March 2015. H (18) M (10) L (6)	By March 2016, evidence of number of country teams applying policy tools and frameworks: H (26) M (14) L (8)	38 applications by IMF country teams by March 2017. H (38) M (25) L (16)	
		Achieved	34	48	64	
		Source				
		IMF				
	Output Indicator 2.2		Baseline	Milestone 1	Target (date)	
	Application and use of tools and frameworks by country authorities.	Planned	Application by six country authorities by March 2015. H (6) M (4) L (3)	By March 2016, evidence of number of country authorities applying policy tools and frameworks: H (8) M (5) L (4)	Application by 11 country authorities by March 2017. H (11) M (8) L (6)	
		Achieved	7	9	16	
		Source				
		IMF				
	IMPACT WEIGHTING					
30%						
INPUTS (£)	DFID (£)		Govt (£)	Other (£)	DFID SHARE (%)	

INPUTS (HR)	DFID (FTEs)					



INPUTS (HR)	DFID (FTEs)					
OUTPUT 4	Output Indicator 4.1		Baseline	Milestone 1	Target (date)	Assumptions
IMF strengthens capacity building by expanding the network of LIC researchers who are new to the field of macroeconomic research on LICs.	Number of commissioned research papers produced on thematic areas.	Planned	Eight commissioned research papers by March 2015. H (8) M (6) L (4)	By March 2016, number commissioned papers: H (16) M (10) L (6)	20 commissioned research papers produced by March 2017. H (20) M (18) L (10)	
		Achieved	13	13	20	
	Output Indicator 4.1.1		Baseline	Milestone 1	Target (date)	
	Toolkits offering publicly available datasets to encourage further uptake of work and expand network of researchers	Planned	N/A	By March 2016, toolkits produced: H (2) M (1) L (0)	Three toolkits produced by March 2017. H (3) M (2) L (1)	
		Achieved	1	2	5	
		Source				
		IMF				
	Output Indicator 4.2		Baseline	Milestone 1	Target (date)	
	Attendance of number of external researchers at high-level policy conferences.	Planned	Attendance at six conferences by March 2015. H (6) M (4) L (3)	By March 2016, number of conferences: H (8) M (6) L (4)	Attendance at 11 high-level conferences by March 2017. H (11) M (9) L (6)	
		Achieved	16	31	51	
	Output Indicator 4.3		Baseline	Milestone 1	Target (date)	
	Outputs and project disseminated in e-newsletter and updated public webpage (updates of e-newsletter and/or webpage)		By March 2015, number of updates: H (10) M (6) L (5)	By March 2016, number of updates: H (14) M (8) L (6)	By March 2017, 18 updates: H (18) M (14) L (10)	

IMPACT WEIGHTING		Achieved	10	14	18

15%

## Appendix 2: Financial Reports



**International Monetary Fund**  
**DFID Macroeconomic Research in Low Income Countries - Phase 2**  
**Cash Flow Statement**  
**From FY2013 to FY2017**  
**As of April 30, 2017**  
**(In U.S. Dollars)**

Activity	FY2013	FY2014	FY2015	FY2016	FY2017
Balance Brought Forward	2,385,418	1,894,648	1,717,827	4,309,255	3,035,365
Contribution Received	1,431,773	2,051,464	4,594,260	2,254,739	2,148,457
Interest Earned	1,628	499	752	7,369	16,783
<b>Total Cash Available</b>	<b>3,818,819</b>	<b>3,946,611</b>	<b>6,312,838</b>	<b>6,571,363</b>	<b>5,200,604</b>
Expenses Paid	1,924,171	2,228,784	2,003,583	3,535,999	3,576,084
<b>Cash Balance</b>	<b>1,894,648</b>	<b>1,717,827</b>	<b>4,309,255</b>	<b>3,035,365</b>	<b>1,624,520</b>



**International Monetary Fund**  
**DFID Macroeconomic Research in Low Income Countries - Phase 2**  
**Detailed Project Status Report**  
**As of April 30, 2017**  
**(In U.S. Dollars)**

Project Description	Status	Start Date	End Date	Latest Approved/ Proposed Budget	Expenses	Remaining Balance	Execution (%)
<b>DFID Macro Research 2</b>	<b>Approved</b>	<b>05/01/2012</b>	<b>03/31/2017</b>	<b>14,144,483</b>	<b>12,400,580</b>	<b>1,743,903</b>	<b>88%</b>
Contractuals				6,613,470	5,872,923	740,547	89%
Visiting Scholars				2,317,771	2,157,959	159,812	93%
Travel and Conferences				2,919,125	2,231,905	687,220	76%
Contingency				-	-	-	0%
Project Backstopping				2,081,587	2,001,746	79,841	96%
Project Management				212,530	136,048	76,482	64%
<b>Subtotal</b>				<b>14,144,483</b>	<b>12,400,580</b>	<b>1,743,903</b>	
Trust Fund Management Fee				990,114	868,041	122,073	
<b>Grand Total</b>				<b>15,134,597</b>	<b>13,268,621</b>	<b>1,865,976</b>	

Agreement summary	
Contributions to date	14,866,026
Net Transfers	-
Interest earned	27,116
<b>Total inflows</b>	<b>14,893,142</b>
Expenses to date	13,268,621
Remaining budget (including projects pending approval)	1,865,976
<b>Total outflows</b>	<b>15,134,597</b>
Expected future contributions (based on signed agreements)	-
<b>Total available &amp; future contributions</b>	<b>(241,455)</b>

## Appendix 3: Research Outputs

### Output 1.1 – Working Papers

1. [VAR meets DSGE: Uncovering the Monetary Transmission Mechanism in Low-Income Countries](#)

Andrew Berg, Bin Grace Li, Christopher S Adam, Peter J Montiel, and Stephen A. O'Connell

Summary: VAR methods suggest that the monetary transmission mechanism may be weak and unreliable in low-income countries (LICs). But are structural VARs identified via short-run restrictions capable of detecting a transmission mechanism when one exists, under research conditions typical of these countries? Using small DSGEs as data-generating processes, we assess the impact on VAR-based inference of short data samples, measurement error, high-frequency supply shocks, and other features of the LIC environment. The impact of these features on finite-sample bias appears to be relatively modest when identification is valid—a strong caveat, especially in LICs. However, many of these features undermine the precision of estimated impulse responses to monetary policy shocks, and cumulatively they suggest that “insignificant” results can be expected even when the underlying transmission mechanism is strong.

2. [Investing in Public Infrastructure: Roads or Schools?](#)

Bin Grace Li, Giovanni Melina, Manoj Atolia, and Ricardo Marto

Summary: Why do governments in developing economies invest in roads and not enough in schools? In the presence of distortionary taxation and debt aversion, the different pace at which roads and schools contribute to economic growth turns out to be central to this decision. Specifically, while costs are front-loaded for both types of investment, the growth benefits of schools accrue with a delay. To put things in perspective, with a “big push,” even assuming a large (15 percent) return differential in favor of schools, the government would still limit the fraction of the investment scale-up going to schools to about a half. Besides debt aversion, political myopia also turns out to be a crucial determinant of public investment composition. A “big push,” by accelerating growth outcomes, mitigates myopia—but at the expense of greater risks to fiscal and debt sustainability. Tied concessional financing and grants can potentially mitigate the adverse effects of both debt aversion and political myopia.

3. [Investing in Electricity, Growth, and Debt Sustainability: The Case of Lesotho](#)

Aidar Abdychev and Michele Andreolli

Summary: This paper analyses a large public investment in a construction of a hydropower plant in Lesotho and its implications on the growth and debt sustainability. The paper employs an open economy dynamic general equilibrium model to assess the benefits of a large public investment through growth-enhancing increase in domestic energy supply and receipts from selling electricity abroad to ease the fiscal burden, which is often associated with big investment projects. During the transition (construction stage), various financing options are explored: increase in the public debt, increase in domestic revenue (fiscal adjustment), and combination. The calibration matches Lesotho's data and it captures the project's main challenges regarding the project costs. Moreover, the key remaining issue is the agreement with South Africa to purchase a sufficient amount of electricity to allow the potential plant to run at a high capacity. We find that, the project can lead to sizable macroeconomic benefits as long as costs are relatively low and demand from South Africa is sufficiently high. However, the risks for the viability of the project are high, if these assumptions are violated.

4. [Collect More, Spend Better: Public Investment in Asian Frontier Markets](#)

Jiri Jonas, Kaitlyn Douglass, Manuk Ghazanchyan, and Ricardo Marto

Summary: We use a dynamic small open economy model to explore the macroeconomic impact of alternative public investment scaling-up scenarios, analyzing how improving the efficiency of capital spending and of tax revenue collection affect growth and debt sustainability for three fast-growing Southeast Asian economies: Cambodia, Sri Lanka, and Vietnam. We show that a gradual public investment profile is more favorable than front-loading capital spending because we assume governments are able to gradually learn how to invest more efficiently, accelerating public capital accumulation and therefore growth. We discuss the pros and cons of alternative financing options and identify the financing mix that generates the best macroeconomic outcome. Sometimes overlooked, improving the efficiency of revenue collection over time may ease the burden of fiscal adjustment, achieving higher GDP growth with substantially lower debt-to-GDP ratios, and will help policymakers efficiently meet the challenge of addressing large infrastructure gaps while maintaining debt sustainability.

5. [Capital Account Openness in Low-income Developing Countries: Evidence from a New Database](#)

Daili Wang and Sarwat Jahan

Summary: The relevance of recording and assessing countries' capital flow management measures is well-recognized, but very few studies have focused on low-income developing countries (LIDCs). A key constraint is the lack of an appropriate index to measure the openness of capital account and its change over time. This paper fills the gap by constructing a de jure index based on information contained in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions. It provides an aggregate index to capture the overall openness of the capital account, and provides a breakdown of openness for various subcategories of capital flows. The new database covers 164 countries with information on 12 types of asset categories over the period 1996–2013. The index provides the largest coverage of LIDCs among all existing indices and provides granularity on openness across asset types, direction of flows and residency. The paper examines the link between de jure capital account openness with de facto capital flows and outlines potential applications of this database.

6. [Evolution of Bilateral Capital Flows to Developing Countries at Intensive and Extensive Margin](#)

Juliana Araujo, Povilas Lastauskas, and Chris Papageorgiou

Summary: Araujo et al. (2016) examines capital flows and their evolution at intensive and extensive margins by presenting a parsimonious theoretical account that is then mapped into an econometric framework to allow two-tier decisions and cross-sectional dependence. Results indicate that market entry costs affect investment decisions pertinent to the LICs, consistently with the static theory. However, persistence in extensive margin eliminates this effect once dynamics are allowed.

7. [World Trade in Services: Evidence from A New Dataset](#)

Chris Papageorgiou, Ke Wang, Prakash Loungani, and Saurabh Mishra

Summary: Using a newly constructed dataset on trade in services for 192 countries from 1970 to 2014, this paper shows that services currently constitute one-fourth of world trade and an increasingly important component of global production. A detailed analysis of patterns and stylized facts reveals that exports of services are not only gaining strong momentum and catching up with exports of goods

in many countries, but they could also trigger a new wave of trade globalization. Research applications of the trade in service dataset on structural transformation, resilience, labour reallocation, and income distribution are outlined.

8. [Investing to Mitigate and Adapt to Climate Change: A Framework Model](#)

Anthony Bonen, Prakash Loungani, Willi Semmler and Sebastian Koch

Summary: We propose a macroeconomic model to assess optimal public policy decisions in the face of competing funding demands for climate change action versus traditional welfare-enhancing capital investment. How to properly delineate the costs and benefits of traditional versus adaption-focused development remains an open question. The paper places particular emphasis on the changing level of risk and vulnerabilities faced by developing countries as they allocate investment toward growth strategies, adapting to climate change and emissions mitigation.

9. [Gender Budgeting: Fiscal Context and Current Outcomes](#)

Janet Gale Stotsky

Summary: Gender budgeting is an approach to budgeting that uses fiscal policy and administration to promote gender equality and girls and women's development. This paper posits that, properly designed, gender budgeting improves budgeting, and it places budgeting for this purpose in the context of sound budgeting principles and practices. The paper provides an overview of the policies and practices associated with gender budgeting as they have emerged across the world, as well as examples of the most prominent initiatives in every region of the world. Finally, it suggests what can be learned from these initiatives.

10. [Asia: A Survey of Gender Budgeting Efforts](#)

Lekha Chakraborty

Summary: This paper reviews gender budgeting efforts in Asia. The countries in the region have achieved mixed success in improving gender equality. Gender budgeting is ideally a fiscal innovation that translates gender-related goals into budgetary commitments and can help countries to achieve the Sustainable Development Goals with regard to gender equality. India has a sustainable gender budgeting model for the region, while a few countries in the region have begun such efforts more recently. The legislative mandates for gender budgeting in the Philippines and South Korea are remarkable achievements and are contributing to their efforts.

11. [Caribbean and Pacific Islands: A Survey of Gender Budgeting Efforts](#)

Dhanaraj Thakur, and Tamoya A. L. Christie

Summary: Of the countries in the Caribbean and Pacific Islands, Timor-Leste has the most well-developed gender budgeting initiative. In the Pacific Islands, a few gender budgeting efforts were initiated but did not continue. In the Caribbean, there have been no well-developed gender budgeting efforts, although governments have undertaken policies to promote gender equality. We provide a number of recommendations to improve the effectiveness of gender budgeting efforts. Governments should link gender budgeting to national development plans, set realistic time expectations for achieving results, engage in capacity building with officials, draw upon strengths outside the government, and strengthen regional coordination.

12. [Middle East and Central Asia: A Survey of Gender Budgeting Efforts](#)

Lisa L Kolovich, and Sakina Shibuya

Summary: Gender budgeting uses fiscal policies to promote gender equality and women's advancement, but is struggling to take hold in the Middle East and Central Asia. We provide an overview of two gender budgeting efforts in the region—Morocco and Afghanistan. Achievements in these two countries include increasing female primary and secondary education enrollment rates and reducing maternal mortality. But the region not only needs to use fiscal policies for women's advancement, but also reform tax and financial laws, enforce laws that assure women's safety in public, and change laws that prevent women from taking advantage of employment opportunities.

13. [Western Hemisphere: A Survey of Gender Budgeting Efforts](#)

Corina Rodríguez Enríquez, and Lucía Pérez Frago

Summary: Gender budgeting is an approach to fiscal policy and administration that integrates considerations of women's equality and advancement into the budget. Latin American countries have undertaken diverse gender budgeting initiatives, most of them addressing public expenditures. This paper surveys and assesses some key initiatives, including those in Mexico, Mexico City, Ecuador, Bolivia, and El Salvador, and briefly summarizes others. The five key initiatives offer different perspectives on how countries approach gender budgeting. We find that these initiatives are contributing to the reduction of gender inequality and the advancement of women in Latin America, though there is scope to strengthen them.

14. [Europe: A Survey of Gender Budgeting Efforts](#)

Sheila Quinn

Summary: This paper surveys European gender budgeting efforts, which have enjoyed sustained support for more than a decade and a half. In a number of countries, gender budgeting led to significant changes in budget legislation and administrative practices. In some countries, it is also possible to tie gender budgeting efforts to expenditure and revenue policy reforms. At a time of continued fiscal austerity in Europe, gender budgeting can help inform fiscal policies to ensure gender-related goals are met. Civil society has played an active role in advocating for effective gender budgeting.

15. [Sub-Saharan Africa: A Survey of Gender Budgeting Efforts](#)

Janet Gale Stotsky, Lisa L Kolovich, and Suhaib Kebhaj

Summary: Gender budgeting is an initiative to use fiscal policy and administration to address gender inequality and women's advancement. A large number of sub-Saharan African countries have adopted gender budgeting. Two countries that have achieved notable success in their efforts are Uganda and Rwanda, both of which have integrated gender-oriented goals into budget policies, programs, and processes in fundamental ways. Other countries have made more limited progress in introducing gender budgeting into their budget-making. Leadership by the ministry of finance is critical for enduring effects, although nongovernmental organizations and parliamentary bodies in sub-Saharan Africa play an essential role in advocating for gender budgeting.



16. [The Influence of Gender Budgeting in Indian States on Gender Inequality and Fiscal Spending](#)

Asad Zaman and Janet Gale Stotsky

Summary: This study investigates the effect of gender budgeting in India on gender inequality and fiscal spending. Gender budgeting is an approach to budgeting in which governments use fiscal policies and administration to address gender inequality and women's advancement. There is little quantitative study of its impact. Indian states offer a relatively unique framework for assessing the effect of gender budgeting. States with gender budgeting efforts have made more progress on gender equality in primary school enrollment than those without, though economic growth appears insufficient to generate equality on its own. The implications of gender budgeting for fiscal spending were more ambiguous.

17. [Gender Equality and Economic Diversification](#)

Kalpana Kochhar, Lisa L Kolovich, Monique Newiak, and Romina Kazandjian

Summary: We show that gender inequality decreases the variety of goods countries produce and export, in particular in low-income and developing countries. We argue that this happens through at least two channels: first, gender gaps in opportunity, such as lower educational enrollment rates for girls than for boys, harm diversification by constraining the potential pool of human capital available in an economy. Second, gender gaps in the labour market impede the development of new ideas by decreasing the efficiency of the labour force. Our empirical estimates support these hypotheses, providing evidence that gender-friendly policies could help countries diversify their economies.

18. [The Effects of Monetary Policy Shocks on Inequality](#)

Aleksandra Zdzienicka, Davide Furceri, and Prakash Loungani

Summary: This paper provides new evidence of the effect of monetary policy shocks on income inequality. Using a measure of unanticipated changes in policy rates for a panel of 32 advanced and emerging market countries over the period 1990-2013, the paper finds that contractionary (expansionary) monetary actions increase (reduce) income inequality. The effect, however, varies over time, depending on the type of the shocks (tightening versus expansionary monetary policy) and the state of the business cycle, and across countries depending on the share of labour income and redistribution policies. In particular, we find that the effect is larger for positive monetary policy shocks, especially during expansions. Looking across countries, we find that the effect is larger in countries with higher labour share of income and smaller redistribution policies. Finally, while an unexpected increase in policy rates increases inequality, changes in policy rates driven by an increase in growth are associated with lower inequality.

19. [Macroprudential Policy, Incomplete Information, and Income Inequality: The Case of Low-Income and Developing Countries](#)

Margarita Rubio and D. Filiz Unsal

Summary: In this paper, we use a DSGE model to study the passive and time-varying implementation of macroprudential policy when policymakers have noisy and lagged data, as commonly observed in low-income and developing countries (LIDCs). The model features an economy with two agents; households and entrepreneurs. Entrepreneurs are the borrowers in this economy and need capital as collateral to obtain loans. The macroprudential regulator uses the collateral requirement as the policy instrument. In this set-up, we compare policy performances of permanently increasing the collateral requirement (passive policy) versus a time-varying (active) policy which responds to credit developments. Results

show that with perfect and timely information, an active approach is welfare superior, since it is more effective in providing financial stability with no long-run output cost. If the policymaker is not able to observe the economic conditions perfectly or observe with a lag, a cautious (less aggressive) policy or even a passive approach may be preferred. However, the latter comes at the expense of increasing inequality and a long-run output cost. The results therefore point to the need for a more careful consideration toward the passive policy, which is usually advocated for LIDCs.

## Output 1.2 – Published Papers

1. Bilateral Capital Flows to Developing Countries at Intensive and Extensive Margins  
Chris Papageorgiou, J. Araujo, A. and P. Lastauskas

*Journal of Money Credit and Banking*, forthcoming

2. [Joining the Club? Procyclicality of Private Capital In Lower Income Developing Economies](#)

Chris Papageorgiou, J. Araujo, A. David and C. van Hombecck

*Journal of International Money and Finance*

3. [Remittances and Vulnerability in Developing Countries](#)

Giulia Bettin, Andrea F. Presbitero, Nikola Spatafora

*World Bank Economic Review*

4. [Non-FDI Private Capital Inflows in Low-Income Countries: Catching the Wave?](#)

Chris Papageorgiou, J. Araujo, A. David and C. van Hombecck

*IMF Economic Review*, forthcoming

5. [IMF lending and banking crises](#)

Luca Papi, Andrea F. Presbitero, and Alberto Zazzaro

*IMF Economic Review*

6. [Income growth and inequality: The threshold effects of trade and financial openness](#)

G.C. Lim and Paul D. McNelis

*Economic Modelling*

7. [Fiscal limits in developing countries: A DSGE Approach](#)

Huixin Bia, Wenyi Shen, and Shu-Chun S. Yang

*Journal of Macroeconomics*

8. [From natural resource boom to sustainable economic growth: Lessons from Mongolia](#)

Bin Grace Lia, Pranav Gupta, and Jiangyan Yu

9. [Sovereign bonds in developing countries: Drivers of issuance and spreads](#)

Andrea F. Presbitero, Dhaneshwar Ghurab, Olumuyiwa S. Adedejib, and Lamin Njie

*Review of Development Finance*

10. [Emerging and Developing Economies: Entering a Rough Patch or Protracted Low Gear?](#)

*Journal of Policy Modeling*

*Book chapters*

11. [Financial Liberalization, Inequality and Inclusion in Low-Income Countries](#)

Davide Furceri, Jun Ge, and Prakash Loungani

*Dynamic Modeling and Econometrics in Economics and Finance*

12. Public Sector Investment Efficiency in Developing Economies

*The New Palgrave Dictionary of Economics*, forthcoming

13. Empowering Women Can Diversify the Economy

Romina Kazandjian, Lisa Kolovich, Kalpana Kochhar, and Monique Newiak

[Women, Work, and Economic Growth: Leveling the Playing Field](#)

**Output 1.3 – Freely available books**

1. [Monetary Policy in sub-Saharan Africa](#) is a volume that collects both policy- and research-oriented work by IMF staff on this topic in recent years. Its objectives are threefold. First, it provides a comprehensive view of the evolving nature of monetary policy frameworks in sub-Saharan African countries, and the challenges central banks are facing along the way. Second, it reviews the empirical evidence regarding African economies and the effects of monetary policy in the region. Third, it presents recent efforts to develop modern macroeconomic models that are suitable for African countries to help clarify some of the key policy challenges and guide monetary policy decisions and communications. Multiple model applications and case studies are included. By combining extensive policy discussions, empirical tools, and state of the art modeling techniques, the volume highlights the key role that greater analytical capacity can play in monetary policymaking in Africa, and it complements joint efforts by the IMF and central banks in the region to develop such capacity in-house. It should be of interest to economists in policy institutions and academia interested in this topic. The volume is edited by Andrew Berg and Rafael

Portillo. This book has been accepted for publication by Oxford University Press and will likely be available in December 2017.

2. The IMF will publish a book, Gender Equality and Fiscal Policies, focusing on gender budgeting efforts. The introduction will offer a summary of lessons learned from the IMF global study on gender budgeting, while the remaining six chapters will feature summaries of significant gender budgeting efforts around the world. The IMF accepted the book for publication in 2016, and the Fund will cover the cost of editing the book. The book is to be released in the fall of 2017.

## **Output 2.1 – Country Applications with IMF Country Teams**

### *FPAS framework*

1. Forecasting and Policy Analysis System (FPAS) Customized Training for the IMF Country Teams  
The IMF's Institute for Capacity Development (ICD) and the African Department (AFR) are developing a FPAS framework to facilitate AFR country teams' discussions with authorities. As part of this initiative ICD conducted a training program consisting of (i) a series of lectures on the theoretical and operational underpinnings of FPAS, (ii) software training by ITD, and (iii) a series of hands-on practical sessions in modelling and forecasting. The training has been supplemented by a number of hands-on assignments to allow the participants to practice the new skills.

### *DIG/Investment scaling up/Debt sustainability*

2. [Burkina Faso: Selected Issues](#)  
Burkina Faso, like many developing countries, has significant infrastructure gaps. The central policy question is how best to make use of resource revenues to support the economy while maintaining debt sustainability. The 2016 Selected Issues Paper for Burkina Faso applied the Buffie et al. (2012) model to estimate the to compare the impact of public investment scaling up. The results of the simulation indicate that long-term debt sustainability would be compromised by the increase in spending and borrowing implied by the National Economic and Social Development Plan.
3. Kyrgyz Republic: Article IV Consultation  
The Kyrgyz Republic is one of the pilot countries of the Infrastructure Policy Support Initiative (IPSI). As part of this initiative, the 2016 Staff Report used the Buffie et al. (2012) model to assess the macroeconomic implications of the Kyrgyz Republic's public infrastructure investment scaling-up plan. A significant part of the public investment is expected to be financed through external concessional loans. The scaling-up plan could modestly support growth in the baseline scenario, without any adverse external shocks, and at current level of public investment efficiency. However, without improvement in public investment efficiency, any adverse shock, for example a further decline in commodity prices that the economy exports can undermine debt sustainability.
4. [Maldives: Article IV Consultation](#)  
The 2016 Article IV Staff Report for Maldives applies the Buffie et al. (2012) model to assess growth, fiscal, and debt sustainability implications of infrastructure scaling up. The ambitious infrastructure program is aimed at airport development, which has significant growth potential for this tourism dependent economy. However, IMF staff analysis showed that the impact on public finances will also be significant, requiring large increases in taxes. Inefficiencies in public investment and uncertainties about complementary private sector investment would exacerbate downside risks from the project

whereas sound project implementation is an upside risk.

5. [Namibia: Selected Issues](#)

The authorities in Namibia have embraced ambitious fiscal consolidation plans, and the key challenge is to minimize the negative effects on growth. This paper assesses the impact on growth of alternative fiscal consolidation strategies using Buffie et al. (2012) model simulations. Overall, minimizing the negative impact of fiscal consolidation on growth requires combining revenue and expenditure measures, together with fiscal structural reforms.

*MDAM/Inclusion*

6. [Guatemala: Selected Issues](#) and [Guatemala: 2016 Article IV Consultation](#)

Guatemala has high levels of poverty and inequality, with distinct patterns in terms of rural-urban as well as ethnic divide. At the same time, low tax revenues constrain the size of the government and thus the scope to pursue social objectives. In a recent Selected Issues Paper, the team has quantified the poverty gap and estimated the effect on growth and redistribution of alternative tax/spending policy combinations. Results suggest that the extreme poverty gap amounts to about 1 percent of 2016 GDP, while lifting all poor out of total poverty would take at least 7 percent of GDP. Raising revenues through higher and more progressive PIT would be less detrimental to growth and poverty/inequality than the VAT. Redistributing 1 percent of GDP through the existing cash transfer program would reduce extreme poverty by 4 percentage points. Trade-offs on the spending side imply that both cash transfers and public investment need to increase to reduce poverty while simultaneously fostering growth.

7. [Honduras: 2016 Article IV Consultation](#)

Progress on inclusive growth reforms have been good and are set to continue. Staff analysis shows that while some measures needed to improve the fiscal situation have been regressive, such as the increase in the VAT rate, the authorities were effective in redistributing additional resources through direct transfers such as the program *Vida Mejor*. The joint effect of the two measures alone had a small but negative effect on aggregate output. However, fiscal stabilization also brought macroeconomic stability and lower interest rates, which translated into new business opportunities, especially in the rural sector, thus boosting GDP and decreasing poverty and inequality further. As a result, staff estimates that the economic reforms implemented over the last two years have helped to reduce poverty and income inequality. To lower poverty and inequality further, structural reforms on the labour market to improve labour mobility across sectors will be key.

8. [Bolivia: Article IV Consultation](#)

Bolivia's macroeconomic management of the commodity boom facilitated a decade of strong macroeconomic performance and poverty reduction and the accumulation of sizable policy buffers. Sharply lower commodity prices pose serious challenges to making further progress towards the objectives laid out in the authorities' Patriotic Agenda 2025, including eradication of extreme poverty, better access to health and education, and state-led industrialization. Sizable fiscal and external current account surpluses during the last decade have turned into large deficits. These deficits are projected to persist over the medium term under current policies, eroding policy buffers and raising questions about the sustainability of the plan.

9. [Myanmar: 2016 Article IV Consultation](#) and [Myanmar: Selected Issues](#)

This paper takes stock of progress in Myanmar's financial sector reform since 2012 and updates Fund advice on priorities for financial sector reform over the next two to three years. The authors use a Dynamic Stochastic General Equilibrium (DSGE) model to examine the macro and distributional impact

of financial sector reform and find that financial liberalization i) increases savings, private credit, and growth; ii) reduces nationwide inequality and poverty; and iii) increases access to credit for the rural population and has a positive effect on agricultural output and farm income.

According to the IMF mission chief for Myanmar, “The authorities are highly receptive to the message that financial inclusion and access to credit needs to be expanded and are considering policy changes in line with those discussed in the SIP. The SIP has been used for engagement with some stakeholders as part of overall post-Article IV outreach.”

10. [Morocco: Selected Issues](#)

This paper quantifies the effect of gender inequality in Morocco on growth, compared to groups of faster growing countries. It also estimates income losses due to low female labour force participation. The results highlight that closing overall gender gaps would help Morocco close its GDP per capita gap with benchmark countries in other regions by up to 1 percentage point. Simulations also show that gradually closing gender gaps in the labour force participation rate could lead to significant income gains over the long term. Policy recommendations to promote gender equality include investing in secondary education for women and in infrastructure, and reforming gender-discriminatory tax policies and laws.

11. **Course for IMF Country Teams on Assessing Distributional Impacts of Structural Policies**

To equip IMF country teams with cutting-edge analytical tools on understanding distributional and output impacts of structural policies, ICD, together with SPR and FAD, launched an Internal Economics Training course on introducing the MDAM (Macro and Distributional Analysis Model) framework which is started to be used in the Fund’s country operational work, as the previous examples indicate. Lectures introducing the frontier research on the backbone of MDAM—the heterogeneous agent model (HAM)—were combined with applications of MDAM in a hands-on workshop.

*Diversification/related structural issues/services trade*

12. [Sierra Leone: Selected Issues Paper](#)

The shutdown of iron ore production and tumbling commodity prices have revived the discussion in Sierra Leone on the need to diversify the economy and exports to maintain macroeconomic stability. The paper uses data from the toolkit to describe the state of export diversification in Sierra Leone and formulate policy advice on factors that could boost diversification.

13. [Liberia: Selected Issues Paper](#)

Diversification of Liberia’s economy is essential to increase resilience to shocks from commodity price swings, create employment, and provide additional growth drivers. Based on findings of the recent literature on export diversification and growth this note compares Liberia to a benchmark set of countries, considers ways to diversify the Liberian economy, and discusses initiatives to promote export diversification and growth.

14. [Senegal: Article IV Consultation](#)

This work investigates export diversification, quality upgrading, and competitiveness in Senegal, comparing its performance with those of fast growing countries in the region and with other countries with similar (or slightly higher) levels of income per capita, but with a more diversified export structure (e.g. Tanzania, Cote d’Ivoire and Vietnam). The analysis shows that Senegal is a relatively diversified economy, both in terms of export products (manufacturing and services) and partners—even though a significant part of exports is concentrated in the region—but with room for quality upgrading,

especially in agriculture. Moreover, much of the apparent diversification may be linked to serving captive markets in the region, particularly Mali and, thus overstate the degree of true competitiveness.

15. [Vanuatu: Article IV Consultation](#)

In the 2016 Vanuatu Article IV Staff Report, IMF staff analyzed the real effective exchange rate (REER) for Vanuatu and showed that a sectoral decomposition of the REER may unveil some price competitiveness challenges. Small states tend to have lack of data on trade in goods and services, and the standard REER assessment is based on estimated coefficients across a panel of countries with very different characteristics and where small states are underrepresented. To complement that analysis, we studied how “sectoral” REER evolved across time by adjusting currency and inflation weights by those implied by key sectors in the economy.

16. [Consultation Launching Export Accelerations in Latin America](#)

The paper, prepared as part of the Western Hemisphere Department’s [Cluster Report](#) on Trade Integration in the Latin America and the Caribbean, uses the diversification toolkit to show that diversification helps promote export surges. For LAC countries, this effect occurs through the extensive margin of trade (an increase in the range of products exported).

## **Output 2.2 – Uptake by Country Authorities**

1. [East African Community](#)

The IMF team delivered two presentations at the annual EAC Monetary Affairs Committee meeting in Uganda in July 11-14, 2016, focusing on the role of FPAS as a system underpinning forward-looking monetary policy framework. The EAC governors expressed support for adopting FPAS in their respective central banks, as an integral part of a broader move towards adopting interest rate-based monetary policy frameworks by end-2018. Furthermore, the team has been asked to moderate bi-annual meetings of the EAC FPAS working group, established as a forum for peer-to-peer learning and experience exchange among the modelling and forecasting teams of EAC central banks. The team participated in the November 2016 group’s meeting in Zanzibar.

2. [Bank of Ghana: customized training](#)

With the assistance provided under the project, the IMF arranged three customized training missions to help enhance decision-making processes at the Bank of Ghana (BoG), develop a new communication strategy, and strengthen the staff’s forecasting and analytical capacities. The missions were organized as a part of the continuing initiative to reinforce the BoG’s existing inflation targeting framework. The BoG, with the assistance provided under the project, has been making progress in several dimensions. The forecasting team has been reinforced and has been trained intensively on strengthening the modelling framework behind the macroeconomic projections, including improving the quality of interactions between the modelers and the area experts, and on putting in place a formal forecasting calendar.

3. [Bank of Tanzania: customized training](#)

The team has helped the Tanzanian authorities develop a capacity-building plan so that the Bank of Tanzania (BoT) can transition to a more modern monetary framework. The milestones of the plan include: creating a forecasting team that will be responsible for the development of the FPAS; establishing a regular short- and medium-term forecasting process based on a pre-approved calendar; regular staff presentations of the forecast and policy recommendations to policymakers; and a regular



monetary policy report.

4. Bank of Malawi: customized training

The team has helped with a scoping mission to Malawi to launch a medium-term capacity development plan to modernize monetary policy formulation and operations at the Reserve Bank of Malawi (RBM). The plan will (i) modernize monetary policy formulation process through development of a FPAS framework; (ii) enhance monetary operations and market development; and (iii) enhance external communications. The subsequent three missions included intensive hands-on training for RBM staff in modelling and forecasting software and techniques and helped the RBM forecasting team launch the development of a semi-structural quarterly projection model.

5. Bank of Mozambique: customized training

The team has helped Bank of Mozambique (BoM) review forecasting practices, check the performance of the core structural model, and develop additional tools for forward-looking monetary policy analysis and forecasting. The BoM Governor strongly supports the IMF's capacity building project for Mozambique as the Bank transitions to an interest rate-based operational framework.

6. African Training Institute Workshop on Modernizing Monetary Policy Frameworks

As part of roll out of the Board paper "Evolving Monetary Policy Frameworks in Low-Income and Other Developing Countries," mid- and a high-level peer-to-peer workshops were organized for officials from the SSA central banks. Both events were highly praised by the participants. Among other things, there was a consensus between the participants about the need for and important role of structural models in the FPAS; one of the key takeaways was, however, that modelers in the central banks should use the models to help tell forecast stories, rather than applying/trusting them blindly.

7. Vanuatu

IMF Staff employed a refined version of the Debt-Investment-Growth model to provide a framework for promoting resilient infrastructure and adequate maintenance. It was demonstrated that although more expensive, investing in adaptation (either infrastructure such as seawalls, breakwater reefs, that can withstand stronger weather events; or through relocating key infrastructure and conducting disaster mapping) can have positive spillovers. Ensuring the maintenance of critical infrastructure is adequately funded and part of a medium-term expenditure framework is critical (e.g., stable allocations for the Infrastructure Maintenance Fund, and including donor support). The authorities broadly concurred with the assessment of debt sustainability analysis. They noted that the ambitious development plan and reform agenda may cause more pressure on debt sustainability and agreed with the importance of rebuilding fiscal buffers over the medium term. They conveyed their intention of seeking grant financing for new projects and expected the comprehensive tax reform to yield additional revenues.

### **Output 3.1 – High-level Policy Conferences Attended by IMF Senior Staff**

1. Low-income and Developing Countries: Conference on Sustainable Economic Development in a Challenging Global Environment

This one-day conference, held during the IMF 2016 Spring Meetings, examined inequality, public investment, and key challenges for development. Panelists included the IMF Managing Director; two IMF Deputy Managing Directors; the Director of the IMF African Department; the Director of the IMF Strategy, Policy, and Review Department; the Deputy Director of the IMF Research Department; as well



as outside experts such as Abhijit Banerjee, Paul Collier, Benno Ndulu, Ngozi Okonjo-Iweala, Alamine Ousmane Mey and Larry Summers.

2. [Conference on Gender and Macroeconomics](#)

A conference on Gender and Macroeconomics was held on March 23-24, 2017 at the IMF Headquarters in Washington, DC. The IMF Managing Director and the IMF Director of the Research Department offered opening remarks. The conference provided a forum for discussing innovative empirical and theoretical research on gender and macroeconomics and policy implications, with specific application to the challenges of low-income and developing countries. Topics included female labour force participation, financial inclusion, trade diversification, firm performance, intra-household choices, public investment, and macroeconomic outcomes.

3. [Third Annual Workshop on Macroeconomic Policy and Income Inequality](#)

The Third Workshop on Macroeconomic Policy and Income Inequality in Developing Countries was held at the IMF headquarters in Washington, DC, on February 09-10, 2017. Academics and policy experts participated in two days of presentations and discussions on critical macroeconomic policy and inequality issues in developing countries. In particular, the workshop covered macro-critical issues such as what are the causes and consequences of resource misallocation across sectors, the link between international trade and income inequality, and the importance of energy investment in economic growth.

4. [Conference on Fiscal Policies and Gender Equality](#)

The IMF hosted a one-day conference on Fiscal Policies and Gender Equality on November 7, 2016. Approximately 225 attendees from IMF/World Bank, NGOs, think tanks, universities, consulting firms, and UN agencies joined the opening session, which featured a panel discussion among Ms. Christine Lagarde, Managing Director of the IMF, Ms. Phumzile Mlambo-Ngcuka, Executive Director of UN Women, Ms. Laura Tyson, Professor of Economics, University of California-Berkeley and former chair of the White House Council of Economic Advisors, and Ms. Julie Delahanty, Executive Director, Oxfam Canada. Ms. Diane Elson, Professor Emerita, University of Essex and UK Women's Budget Group, offered the keynote address, and Ms. Sheila MacVicar moderated the opening panel and served as the master of ceremonies throughout the day.

Various media outlets covered the conference including [The New York Times](#), [Yahoo!](#), [News Nation](#), [Plant](#), [The China Post](#), [The Daily Sabah](#), [The Hamilton Spectator](#), and [The New Jersey Herald](#).

5. [Conference on Global Labour Markets](#)

A conference on global labour markets was held on September 1-2, 2016. The IMF Deputy Managing Director Tao Zhang provided the opening remarks for the conference, which featured work on the relationship between jobs and growth in low-income countries; presentations on the role of the private sector in meeting sustainable development goals, including the goal of full and productive employment (SDG8); and discussions on the design of labour market institutions in low-income countries.

6. [IMF Annual Meetings Seminar on Infrastructure in Developing Countries](#)

As part of the 2016 Annual Meetings, the team organized a seminar "Toward Better Infrastructure in Developing Countries" on October 5, 2016. Discussants included Mr. Mitsuhiro Furusawa, Deputy Managing Director of the IMF, Ms. Kemi Adeosun, Minister of Finance of Nigeria, Mr. Anders Borg, Chair of the World Economic Forum's Global Financial System Initiative, Mr. Aldo Caliari, Director of the Rethinking Bretton Woods Project at the Center of Concern, Mr. Paul Collier, Professor of Economic and Public Policy at the Blavatnik School of Government at the University of Oxford, and Mr. Jonathan

Taylor, Vice President and member of the Management Committee of the European Investment Bank. The panel discussed the importance of addressing infrastructure gaps in developing countries, what has worked in countries that have successfully scaled up, what challenges remain, and how policy can play a role.

7. UN High Level Dialogue on Challenges Facing Commodity-Dependent LICs

Prakash Loungani, IMF Chief of Development Macroeconomics (and co-manager of the IMF-DFID program) participated in this UN conference and gave a [presentation](#) on fiscal and structural challenges facing commodity-dependent developing economies. The diversification toolkit developed under the IMF-DFID project was used to illustrate possible growth strategies for commodity-dependent economies. The presentation also discussed the near-term adjustment needed in some commodity-dependent LICs. Using the DIGNAR model developed under the project, the likely counter-productive effects of making the adjustment solely through sharp cuts in public investment were illustrated and compared with other options for fiscal adjustment.

8. UN Session on Challenges for Least Developed Countries

Rupa Duttagupta, IMF Chief of LIC Strategy Unit (and co-manager of the IMF-DFID program) presented the report [Macroeconomic Developments and Prospects in Low-Income Developing Countries - 2016](#) at a session to officials from UN member states and UN institutions and civil society. The session highlighted the challenges faced by the Least Developed Countries and in particular those that are commodity-dependent in their exports. The Office of the High Representative of Least Developed Countries, Landlocked Developing Countries, and Small Island Developing States organized the January 2017 session.

9. International Labour Organization session on Fiscal and Structural Challenges facing LICs

Prakash Loungani, IMF Chief of Development Macroeconomics (and co-manager of the IMF-DFID program) participated in this ILO session and used the team's research and toolkits to discuss fiscal and structural challenges facing commodity-dependent developing economies. The session had officials from a dozen LIC, including from labour ministries.

## **Output 3.2 – Results of papers reflected in IMF Board discussions and papers**

### *Papers discussed by the IMF Executive Board*

1. [Macroeconomic Developments and Prospects in Low-Income Developing Countries - 2016](#)

In a recent IMF Policy Paper, the overarching theme is that of an incomplete adjustment to the new world of “lower for long” commodity prices, with many commodity exporters still far from a sustainable macroeconomic trajectory. The paper analyzes risks and vulnerabilities from financial sector stresses and medium-term fiscal risks, and points to actions needed to manage these challenges. The paper also looks at how infrastructure investment can be accelerated in LIDCs, given that weaknesses in public infrastructure are widely seen as a key constraint on medium-term potential growth. With the sharp adjustment in commodity prices now into its third year: a) many commodity exporters remain under significant economic stress; b) countries with more diversified export bases are generally doing well; c) widening fiscal imbalances, in both commodity and diversified exporters, have resulted in rising debt levels, with severe financing stress emerging in some cases; and d) financial sector stresses have emerged in many LIDCs. Key messages on financial sector oversight, on medium-term fiscal risks, and on tackling infrastructure gaps are flagged.

2. [Small States' Resilience to Natural Disasters and Climate Change - Role for the IMF](#)

Small developing states are disproportionately vulnerable to natural disasters. On average, the annual cost of disasters for small states is nearly 2 percent of GDP—more than four times that for larger countries. This reflects a higher frequency of disasters, adjusted for land area, as well as greater vulnerability to severe disasters. About 9 percent of disasters in small states involve damage of more than 30 percent of GDP, compared to less than 1 percent for larger states. Greater exposure to disasters has important macroeconomic effects on small states, resulting in lower investment, lower GDP per capita, higher poverty, and a more volatile revenue base.

*Staff Discussion Note (SDN)*

3. [Macro-Structural Policies and Income Inequality in Low-Income Developing Countries](#)

Despite sustained economic growth and rapid poverty reductions, income inequality remains stubbornly high in many low-income developing countries. This pattern is a concern as high levels of inequality can impair the sustainability of growth and macroeconomic stability, thereby also limiting countries' ability to reach the Sustainable Development Goals. This underscores the importance of understanding how policies aimed at boosting economic growth affect income inequality. Using empirical and modeling techniques, the note confirms that macro-structural policies aimed at raising growth payoffs in low-income developing countries can have important distributional consequences, with the impact dependent on both the design of reforms and on country-specific economic characteristics. While there is no one-size-fits-all recipe, the note explores how governments can address adverse distributional consequences of reforms by designing reform packages to make pro-growth policies also more inclusive.

A [blog](#) by the IMF Managing Director highlights the findings and policy recommendations.

*WEO/REO*

4. [Box 1.2](#). “Macroeconomic Developments and Outlook in Low-Income Developing Countries: The Role of External Factors” draws on the team’s research to parse out the external factors behind the slowdown in low-income developing countries: sharply lower commodity prices, lower growth in trading partners, and tighter financing conditions.
5. [Box 2.1](#). “Capital Flows to Low Income Developing Countries” draws on the team’s research to analyse the experience with capital flows in LIDCs in the period after the global financial crisis and highlights important differences in the experience from other emerging market economies.
6. [Box 1.1](#). “Reaping the Benefits from Export Diversification”  
Drawing on the diversification work of the team, the October 2016 Sub-Saharan Africa Regional Economic Outlook examined the benefits of export diversification. Many economies in the sub-Saharan Africa region still reel from the commodity price slump; diversification is emerging as an important channel to foster growth and increase resilience. Supporting infrastructure upgrades, price competitiveness and trade openness, as well as equal opportunities, appear to be powerful levers to enable export diversification.

**Output 4: IMF strengthens capacity building by expanding the network of LIC researchers.**

## Output 4.1 – Commissioned Papers

### 1. [Asia: A Survey of Gender Budgeting Efforts](#)

Summary: This paper reviews gender budgeting efforts in Asia. The countries in the region have achieved mixed success in improving gender equality. Gender budgeting is ideally a fiscal innovation that translates gender-related goals into budgetary commitments and can help countries to achieve the Sustainable Development Goals with regard to gender equality. India has a sustainable gender budgeting model for the region, while a few countries in the region have begun such efforts more recently. The legislative mandates for gender budgeting in the Philippines and South Korea are remarkable achievements and are contributing to their efforts.

### 2. [Caribbean and Pacific Islands: A Survey of Gender Budgeting Efforts](#)

Summary: Of the countries in the Caribbean and Pacific Islands, Timor-Leste has the most well-developed gender budgeting initiative. In the Pacific Islands, a few gender budgeting efforts were initiated but did not continue. In the Caribbean, there have been no well-developed gender budgeting efforts, although governments have undertaken policies to promote gender equality. We provide a number of recommendations to improve the effectiveness of gender budgeting efforts. Governments should link gender budgeting to national development plans, set realistic time expectations for achieving results, engage in capacity building with officials, draw upon strengths outside the government, and strengthen regional coordination.

### 3. [Western Hemisphere: A Survey of Gender Budgeting Efforts](#)

Summary: Gender budgeting is an approach to fiscal policy and administration that integrates considerations of women's equality and advancement into the budget. Latin American countries have undertaken diverse gender budgeting initiatives, most of them addressing public expenditures. This paper surveys and assesses some key initiatives, including those in Mexico, Mexico City, Ecuador, Bolivia, and El Salvador, and briefly summarizes others. The five key initiatives offer different perspectives on how countries approach gender budgeting. We find that these initiatives are contributing to the reduction of gender inequality and the advancement of women in Latin America, though there is scope to strengthen them.

### 4. [Europe: A Survey of Gender Budgeting Efforts](#)

Summary: This paper surveys European gender budgeting efforts, which have enjoyed sustained support for more than a decade and a half. In a number of countries, gender budgeting led to significant changes in budget legislation and administrative practices. In some countries, it is also possible to tie gender budgeting efforts to expenditure and revenue policy reforms. At a time of continued fiscal austerity in Europe, gender budgeting can help inform fiscal policies to ensure gender-related goals are met. Civil society has played an active role in advocating for effective gender budgeting.

### 5. [Policy Lessons from Okun's Law for African Countries](#)

Summary: The main objective of this work is to measure the reaction of unemployment to growth in some African countries. It comes to estimate the Okun's coefficient, test its validity and measure its intensity. The results presented in this work propose that gross domestic unemployment and

production be weakly linked or untied in the majority of the examined countries, regardless of the model used to estimate the Okun's coefficient. Another objective was to determine the origins of the Okun's coefficient variability within Africa. The literature informed us that these origins are in principle of structural, demographic and/or economic nature. In addition, our empirical approach confirmed the relevance of the demographic factors, the level of competition in the domestic market, and the rule of law.

#### 6. [Okun's Law: Unfit for Low-Income Countries?](#)

Summary: We test the performance of Okun's Law in low and lower middle income countries. Our main conclusion is that this stylized fact, which is consistent in advanced countries, generally does not hold in these economies. We include a discussion of the main limitations of the standard framework and potential methods to better understand the short term relationship between GDP and labour market outcomes in this context. Additionally, we utilize the case of Morocco to exemplify how looking at the main developments in the labour markets can help researchers form an expectation of the short term interactions of growth and labour markets.

#### 7. [Investing to Mitigate and Adapt to Climate Change: A Framework Model](#)

Summary: We propose a macroeconomic model to assess optimal public policy decisions in the face of competing funding demands for climate change action versus traditional welfare-enhancing capital investment. How to properly delineate the costs and benefits of traditional versus adaption-focused development remains an open question. The paper places particular emphasis on the changing level of risk and vulnerabilities faced by developing countries as they allocate investment toward growth strategies, adapting to climate change and emissions mitigation.

### Output 4.1.1 – Toolkits

1. [International Trade in Service and the Comparative Advantage of Nations, 2017](#): The dataset provides the first compilation of detailed historic and new data on world trade in services. It is a useful resource for researchers, policymakers, and businesses for decisions in macroeconomic competitiveness and understanding how technological forces affect rapid resource reallocation in specific sectors.
2. [IMF Gender Portal](#): The team has conducted the first-ever global review of policymakers' use of tax and spending policies to promote gender equality and released an online database toolkit of gender equality indicators worldwide. The project outlines the economic rationale for gender budgeting—the use of fiscal policy and administration to promote gender equality and girls' and women's development. A toolkit highlights successful gender budgeting practices and summarizes key country case studies, drawing from six regional country surveys. The online toolkit also includes two time-consistent indices of gender equality, spanning 1990–2013.
3. **Distributional Incidence Analysis**: A user-friendly toolkit has been developed to conduct incidence analysis of fuel price subsidy reform (a manual was also published in October 2016). The tool provides estimates of the direct and indirect welfare impacts of an increase in fuel prices, and the distribution of these impacts across household income groups. The direct impact arises when households purchase fuel products for cooking, heating, lighting, and private transport. The indirect impact arises when households purchase goods and services that are produced using fuel products. The tool requires

limited inputs and has the advantage of using the commonly available software program Excel. The tool has been used by country teams and in IMF technical assistance work in various countries, including Mali.

#### **Output 4.2 – Attendance of External Researchers at High-Level Policy Conferences**

1. [Gaidar Forum](#), Moscow, January 2017 (presentation by Chris Papageorgiou)
2. [Navarra Center for International Development Conference](#), Madrid, June 2016 (keynote speech by Chris Papageorgiou and presentation by Stefania Fabrizio)
3. The [Global Challenges](#) workshop, organized by the University of Milan, Bocconi University, and Catholic University of Milan
4. The [Conference on Financial Intermediation in Emerging Markets](#), Cape Town, December 2016
5. [5<sup>th</sup> Emerging Scholars in Banking and Finance Conference](#), Cass Business School, December 2016
6. Center of Excellence in Finance, [Gender Responsive Budgeting](#), Ljubljana, April 2016
7. [Innovations in Gender Responsive Budgeting: Sharing Experiences from the Asia Pacific](#), Organized by UN Women and the National Institute of Financial Management, Government of India, Jaipur, India, December 2016
8. [American Economic Association Meetings](#), January 2017
9. [Latin American and the Caribbean Economics Association](#), November 2016
10. [Midwest Macroeconomics Meetings](#) - Federal Reserve Bank of Kansas City, November 2016
11. [Southern Economics Association](#), Washington DC, November 2016

*2017 CSAE Annual Conference ([program](#)):*

12. [Investing in Public Infrastructure: Roads or Schools](#)
13. [Non-FDI Capital Inflows in Low-Income Countries: Catching the Wave?](#)
14. [Stylized Facts about Business Cycles in Sub-Saharan Africa](#)
15. [Emissions and Growth: Who is to blame and how to improve?](#)
16. [Room for Discretion? The Political Economy of the World Bank-IMF Debt Sustainability Analysis](#)
17. [The Macroeconomic and Distributional Effects of Public Investment in Developing Economies](#)

18. [Global Value Chain and Foreign Investors: An empirical analysis on Sub Saharan Africa and Vietnam](#)
19. [Macroprudential Policy, Incomplete Information and Inequality: The case of Low Income and Developing Countries](#)
20. [Commodity Prices and Bank Lending in Low-Income Countries](#)

#### **Output 4.3 – Results disseminated in e-newsletters**

1. [May 2016 Newsletter](#)
2. [August 2016 Newsletter](#)
3. [November 2016 Newsletter](#)
4. [February 2017 Newsletter](#)

#### *Speeches and blogs*

1. The Staff Discussion Note (SDN) on inequality in LICs was publicized through various outlets.
  - a. The SDN was launched by the IMF Managing Director during a speech [in Uganda](#) (She said: “New research that we are releasing today focuses on the relationship between inequality and reforms in key areas such as fiscal policy, the financial sector policy and agriculture. Reducing inequality requires several things: good jobs for young people, a strong emphasis on education and health care, and assistance to the poor, including a social safety net.”) The work was also highlighted in a One World [blog](#).
  - b. There were also three blogs (one by the IMF Managing Director and two short thematic ones) using analysis from this SDN:
    - [The Fruits of Growth: Economic Reforms and Lower Inequality](#)
    - [Chart of the Week: Growth and Inequality](#)
    - [Chart of the Week: Access to Banking Services](#)
2. IMF Deputy Managing Director Tao Zhang, who has oversight over the IMF’s engagement with LICs, wrote a blog on infrastructure in LICs, drawing in part on the team’s research: .  
([Roads to Stronger Growth in Low-Income Countries](#))
3. The co-manager of the team, Prakash Loungani, wrote two blogs drawing on aspects of the team’s work to explain the IMF’s work on inclusion in non-technical terms.
  - a. The blog “[Inclusive Growth and the IMF](#)” noted that a common theme of the IMF’s new initiatives—jobs, equity, governance, financial access and climate change, many of which are



also part of the IMF-DFID project—is a focus on inclusion.

- b. The blog “[The IMF’s Work on Inequality: Bridging Research and Reality](#)” draws extensively on analyses of inequality conducted by the team (e.g. Bolivia)

#### *Articles in Finance & Development*

4. An [article](#) explaining the team’s IMF Working Paper “Macroeconomic Dimensions of Public-Private Partnerships” in non-technical terms was featured in the September 2016 issue.
5. The the implications of the robot revolution for equality were previewed in an [article](#) in the September 2016 issue, drawing on ongoing research by Andy Berg, Ed Buffie and Felipe Zanna—veteran members of the IMF-DFID team.

#### *Articles in IMF Research Bulletin*

6. [Seven Questions on Estimating Monetary Transmission Mechanism in Low-Income Countries](#)  
The important research done under the IMF-DFID project by Chris Adam, Andy Berg and others was summarized in this article.
7. [Does Growth Create Jobs?: Evidence for Advanced and Developing Economies](#)  
This article summarized the team’s work comparing the link between jobs and growth in advanced economies with that in developing economies (emerging markets and LICs). The article makes the important point that while this links is weaker, on average, in developing countries than in advanced ones, there is divergence within the group of developing countries.
8. [The Future Wealth of Nations: World Trade in Services](#)  
This article introduces the new data set on services trade put together by the IMF-DFID team. It notes that services exports from developing countries have grown tenfold since 1990 and at twice the rate of services exports from advanced economies; hence, developing countries’ share has increased from 3 percent in 1970 to over 20 percent in 2014. This increase is not just due to higher exports of traditional services, but is also due to modern technology-enabled services as well.

#### *Media coverage, coverage in IMF sources, and miscellaneous*

9. Publicity for gender budgeting research:
  - a. *The Economist* featured [two articles](#) on the importance of gender budgeting after interviewing Janet Stotsky, Diane Elson, and Lisa Kolovich. There was also a [blog](#) in March from *The Economist* noting how the IMF wants to incorporate gender budgeting into its advice. Media in [India](#), [Jamaica](#), [Nigeria](#), the [Philippines](#), and [Tanzania](#) reported on the results of the study.
  - b. The team presented the main findings of the gender budgeting global survey during an IMF press [conference](#). The IMF [twitter feed](#) has promoted the two gender conferences along with the gender budgeting toolkit launch (#IMFGENDER). The project and results are also featured



prominently on the IMF Gender [website](#). A March 2017 IMF News [article](#) featured the team's work on gender inequality and gender budgeting in Morocco.

10. UN TV: Stefania Fabrizio was interviewed by Alex Wang, Secretary General of Youth Think Center, on how domestic macroeconomic policies can be made palatable from both an economic and distributional perspective. The interview was broadcast on [UN web TV](#).
11. IMF Analytical Corner: Sandra Lizarazo and Marina Mendes-Tavares presented at the IMF [Analytical Corner](#), a TED-style talk, at the IMF Spring Meetings. The presentation shed light on how core macroeconomic and structural policies affect growth and income distribution in developing countries and the channels through which growth-equity tradeoffs tend to be generated.
12. Two-day Workshop on Overview of the Work at the Fund:  
As part of a workshop in Kenya in March 2017 to provide African civil society leaders an overview of the work of the Fund, the team made a well-received presentation on “Macro-structural policies and