PROGRAM IMPACT ASSESSMENT

I. Executive Summary

1. The Indonesian economy is growing at around 5% per annum and, under current capacity constraints, non-inflationary growth will be hard to sustain without a major uplift in capital productivity. The Financial Market Development and Inclusion Program ('the Program') will support that uplift by funding a reconfiguration of prudential regulation, an upgrade of capital market infrastructure in both Islamic and conventional markets, better corporate governance, and stronger alignment with international standards. These reforms, which are valuable in their own right, will also support further reforms under the Program that improve access to financial services and raise financial literacy. The measures are aimed squarely at poverty alleviation, and they will depend on Indonesia achieving a more stable financial climate.

2. The benefits of the Program are estimated to be around $403 million per annum.[1] The bulk ($246 million) will flow from a reduction in the cost of borrowing in the bond markets, as modernization of the prudential framework lifts confidence in the Indonesian economy. A further $65 million follows from longer run improvements in liquidity management, and $92 million could follow from a greater degree of financial inclusion over the next five years.

3. The Program has both fixed costs ($393 million) and recurrent costs (between $171million and $233 million). Most of the fixed costs are generated in output 1 and are associated with the creation of the new independent financial regulator. These have been estimated at $316 million. The variable costs fall mainly on the private sector and are heavily due to new capital charges on systemically important banks.

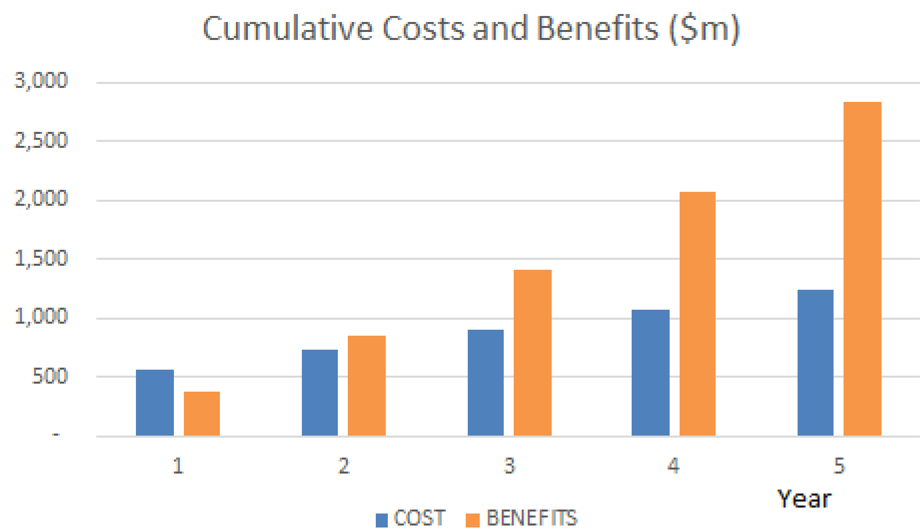
4. The benefits and costs of the Program are tabled below.

		Summary Program Costs and Benefits ($m)				
		Benefits			Costs	
		Recurrent		Fixed	Recurrent	Fixed
Output 1		**246**		--	--	**371**
of which:						
	Government		212			
	Corporate		34			
Output 2		**65**		--	**171**	**10**
of which:						
	Banks		24			
	Public Sukuk issuers		5			
	Corporate sukuk issuers		36			
Output 3		**92***		--	--	**12**
of which:						
	Wealth creation		85			
	Banking for the poor		7			

* Simple average of gains over a five-year period

[1] This involves some simple averaging of returns over a five year horizon.

5. The differential timing of the costs and benefits complicates the analysis slightly. Costs are heavily front-loaded and mainly non-recurring, whereas benefits compound from a lower base. The next chart shows that accumulated benefits are expected to overtake accumulated costs in the second year of the Program.



6. Beyond the quantifiable elements of the Program, there are benefits (but few costs) which are hard to value. Most importantly, the Program will deepen a number of critical markets, and improve use of the capital markets. Separate initiatives targeted at corporate governance will boost these effects, while other educational reforms aimed at individuals will increase the rate of national savings and reduce poverty by raising returns on retail products.

II. Development Problem and Constraints

7. By emerging market standards, Indonesia's current economic growth of 5% is reasonable, though not vigorous. The Government is targeting a rate of 8%, but it will face capacity constraints in reaching, and then sustaining, that rate. A particular problem is the level of excess demand in the economy. The current account deficit, which is 2.9% of GDP, signifies that the country's appetite for investment outstrips its capacity to save. Inflation of 4% confirms the degree of excess demand in the economy, as does the relatively low 5.9% unemployment rate.

8. Market indicators suggest that inflation is likely to persist. Although the government is targeting a rate of around 3.5%, and although the yield curve has flattened over the last few years, ten year yields on government bonds – which are a strong indicator of inflationary expectations – are the highest in the recognized markets of East Asia at 8%.

9. These rates inhibit wealth creation. Indonesia's ratio of share market capitalization is 45% - well below that of Thailand (around 100%), Singapore (150%) and Malaysia (150%). Furthermore, despite good economic growth, the IDX Composite Index increased in real terms by only around 80 basis points per annum between 2010 and 2013. The 6% nominal increase in the index over this period compares unfavorably with outcomes in the Philippines, where the market has been rising at 20% per annum on the back of similarly developed capital markets, a likewise favorable growth outlook, but much lower interest rates and inflation.

10. Macroeconomic problems are also evident in credit spreads. Indonesia consistently posts higher credit default swap (CDS) spreads than most other Asian markets. The CDS spread for five-year senior secured government debt is now 170 points, compared with an East Asian average of around 100.

11. Compounding the macroeconomic pressures on borrowing costs and equity values is a set of microeconomic issues. Financial services has a high growth target of 10.4% by 2019 under the Medium-Term National Development Plan. This will be difficult to achieve without substantial microeconomic reform.

12. In debt securities markets, illiquidity is the major problem. The government bond market is only 13% of GDP, compared with an East Asian average of 58%. Turnover in the market is low, and bid-ask spreads have been steadily widening in recent years. At 50 basis points, they are now very high by East Asian standards.

13. Corporate bond markets face similar problems. The market is equal to just 2% of GDP, compared with an East Asian average of 21%, and the implied illiquidity is adversely affecting pricing. Recent issues at the popular three-year tenor have been priced at around 280 basis points over the government curve. Given that only high quality issuers are able to tap the market, this is a significant margin.

14. Even the small volume of corporate debt on issue seems to overstate the economy's use of direct debt in corporate funding. The top thirty issuers account for three-quarters of the total volume of debt outstanding, and most funds raised in debt securities markets support institutions whose primary business is financial intermediation. Although almost two-thirds of bonds are issued by corporates which are classified as either 'banks' or 'finance', these sectors represent only about a quarter of market capitalization.

15. Illiquidity is also evident in the Islamic segment of the market. There is a strong appetite for Shariah-compliant products, and raising the profile of the Shariah market would undoubtedly lift participation in capital markets more generally. But although certain segments of the market are growing quickly, the scope for improvement remains considerable. Indonesia's sukuk market is only 17% of the size of Malaysia's, yet the overall market in local currency bonds is around 40% of Malaysia's. The relative shortage of sukuk issuance is a corporate phenomenon: sukuk issues comprise only 3% of total corporate bond issues in Indonesia, compared with around 70% in Malaysia.

16. More traditional methods of intermediated finance via the banking sector are similarly inefficient. The ratio of M2 to GDP is only 41%, and it compares poorly with 70% in the Philippines, 144% in Malaysia, and 133% in Singapore. Net interest margins (NIM), which cover banks' operating costs and returns to shareholders, are also notoriously high at around 420 basis points. So too is excess liquidity. The ratio of bank liquid assets to total assets stands at 21%, compared with 16% in Malaysia. The pooling of funds within the banking system is also reflected in a very high system capital adequacy ratio of 19.5% for the commercial banks.

17. A major cause of the operating inefficiency in the banking sector is the lack of a reliable basis for fixed interest pricing. Government bond markets exhibit low turnover, and infrastructure for a viable repo market is inadequate. The lack of a repo market is problematic in itself, since it prevents banks from managing their liquidity efficiently. But the associated lack of a vibrant secondary market for government bonds also hinders fixed interest pricing and

impedes the evolution of the interest rate swap market. In modern financial systems, swaps are essential for the management of liquidity and interest rate risks. The inadequacy of both the swaps and repo markets exaggerates the levels of liquidity needed to meet banks' contingent outflows. Indeed, the requirement for high levels of liquidity is effectively embedded in regulation via an upper limit on the loan-to-deposit ratio.

18. The high cost base of the banks translates into a high cost of borrowing for sectors which rely on intermediated finance. Average lending rates are at around 11.7%, and they are exceeded in Southeast Asia only in Myanmar. As NIM levels suggest, such a high cost of finance is only partly explained by monetary conditions. The real lending rate of interest in Indonesia is around 4.7%, compared with 2.5% and 3% in Malaysia and Singapore, respectively. Of ten South East Asian countries, Indonesia has the fourth highest real lending rate of interest.

19. Indonesia is now trying to remediate the situation by creating a regulatory structure that better supports financial system stability, and it is consolidating financial regulation functions within a newly formed most prudential regulator, Otoritas Jasa Keuangan (OJK). Developed economies with sophisticated financial markets began consolidating their financial regulators in this way around twenty years ago, and Indonesia now seeks to emulate the efficiency gains that many of those economies have since made.

20. The direct expense of this exercise is considerable. OJK will cost approximately $316million in its first two years. Although some of this funding is to replace functions that were carried out by other regulators (and is therefore not incremental spending), the transfer of responsibilities has logistical costs for both government and the supervised firms which need to adapt to it. In addition to the transitional costs, there will be an uplift in the type and quality of supervision.

21. The components of that uplift are discussed in more detail below. They involve the formation of an independent and integrated prudential supervisor, improved data collection facilities, better funded financial stability policy and research functions, initiatives to improve financial literacy, enhanced access to Islamic banking products, improved crisis management protocols, stronger inter-agency co-operation, and improvements to corporate governance.

22. Funding these changes is complicated. OJK will eventually be financed by levies on the institutions that it supervises. In its transitional phases, this arrangement may be vulnerable to pro-cyclical risks. Supervision is most intense, and therefore most expensive, during periods of financial stress. Supervised institutions are concerned that levies to cover the costs of their supervision may rise at precisely the time when they are least affordable. This will be a less valid concern once the new supervision framework has matured and OJK's cost base has stabilized. But in the short term, externally sourced funding has prudential advantages.

23. Besides needing better regulation to improve financial stability conditions, the Government will also have to deepen, and extend access to, capital markets. Standards of governance that are comparable with regional peers will be needed to secure capital inflows on profitable terms, and the Shariah market is impeded by inconsistency with the IFSB's standards for global better practice.

24. Financial inclusion in Indonesia is also deeply problematic, and it is a central plank of the Government's National Development Plan. The archipelago's difficult geography, low levels of financial literacy, and under-developed methods for dispute resolution hinder access to financial

services. Forty per cent of Indonesians do not borrow, and only 13.1% have borrowed from a financial institution. Of the poorest 40% of the population, only 22% have an account with a financial institution, compared with 76% in Malaysia and 96% in Singapore. Only 28% of those in rural areas have an account with a financial institution, and only 16% of those with no more than primary education have an account (compared with 59% in Malaysia). Even those with access to services do not seem to utilize them effectively. Around 41% of Indonesians with an account at a financial institution would not make a deposit in a typical month. This is comparable to rates in the Philippines and about double the rate in Singapore.[2]

25. Mistrust of financial institutions is a major contributing factor. In part, this may be due to the systemic volatility that has episodically troubled Indonesian financial markets since the late-1990s. In any case, financial stability initiatives which reduce that volatility are certainly of greatest benefit for the most marginal users of the financial system.

26. Lower level institutional issues also explain community ambivalence toward financial services. Within less than a year of commencement, OJK's Financial Customer Care service had received 27,000 requests, of which approximately 10% involved disputes regarding insurance claims and transactions with leasing companies. In response, the newly formed Securities Investor Protection Fund has more than doubled in size. Yet even this level of disputes would only be a partial indicator of community dissatisfaction with service provision, and it suggests a need either for greater financial literacy among consumers, or more effective surveillance of conduct and marketing by service providers. The Program funds initiatives which serve both sets of needs.

III Reform Program

27. The Program has three outputs: 'Strengthened Regulatory Structure for Financial Stability', 'Deepening of Financial Market', and 'Enhanced Access to Financial Services'.

28. **Output 1** is aimed at improving the supervisory framework, partly by consolidating prudential supervision across the regulated financial sector within a common regulator, and partly by extending the purview of regulation to encompass financial stability. OJK now has responsibility for conventional banking, capital markets, non-bank financial institutions and Islamic finance.

29. OJK's creation was a target of Subprogram 1. It began operations in December 2012 and is still converging on its target state. A focal point at this time is the upgrading of processes and systems. Under Subprogram 1, an IT blueprint has already been written for the target state architecture. It will consolidate thirty existing applications across six functional areas consisting of presentation services, content management, data analytics, core and supporting business, productivity and collaboration, and data and information management.

30. Output 1 also includes changes to the funding model for OJK. The organization is currently funded from the central government's balance sheet, and a higher degree of fiscal independence will be necessary, as a matter of good governance. Under Subprograms 2 and 3, the funding model will migrate to a system of levies on supervised institutions. Transitional funding arrangements need to be enacted for this to occur.

[2] World Bank: Financial Inclusion Index.

31. Financial stability targets are also included under Subprogram 1. The Government has already created a Financial Sector Stability Forum for coordinating crisis management arrangements. This body now conducts full dress rehearsals for crisis management. In addition, the Government has established a Center for Financial Sector Policies to co-ordinate crisis management planning. A wider national and international role for this body, with commensurate incremental resourcing, is being sought under Subprograms 2 and 3.

32. **Output 2** features a range of initiatives which better align Indonesia with international standards. Indonesia is now a signatory to IOSCO's Multilateral Memorandum of Understanding, and it can participate more fully in the cross-border official exchange of information concerning securities transactions and market integrity issues.

33. As part of its commitment to enhancing the use of Islamic products, OJK has also joined the Islamic Financial Services Board (IFSB). IFSB promotes and enhances the Islamic financial services industry by issuing global prudential standards and guiding principles across banking, capital markets and insurance sectors. Indonesia is now a signatory to IFSB15, a standard which issues guidance on proper capital adequacy and risk management practices for a range of products, including Sukuk. Under Subprogram 3, it plans to implement 70% of the IFSB's requirements under the Standard this year. Pursuant to this, it has also passed enabling guidance for the issuance of Shariah-compliant mutual funds, and it has clarified the legal rights of sukuk holders.

34. In Subprogram 2 of this output, OJK also commits to renewing its Financial Sector Assessment Program (FSAP). FSAPs are conducted under the auspices of the IMF to deliver better practice insights into a wide range of practices related to prudential supervision, financial stability and financial market efficiency. The last such assessment for Indonesia was conducted in 2010.

35. Indonesia has also deepened its integration with ASEAN capital markets. With the technical assistance of the ADB, it has adopted the ASEAN Corporate Governance scorecard to harmonize the conduct of financial conglomerates and the directors of publicly listed companies. Under Subprogram 2, it will be extending this initiative to include the issuance of 'comply or explain' notices.

36. Indonesia is also improving its compliance with directives from the Basel Committee on Banking Supervision (BCBS). Although it still relies on only the basic methods of risk management, it has committed to the application of capital charges for systemically important banks (which are yet to be nominated) under Basel 3. This measure will better protect the financial system against the failure of critical financial institutions.

37. Besides improving compliance with international standards, Output 2 also directly targets market efficiency. In the conventional banking market, Global Market Repurchase Agreements (GMRA) will be adopted under Subprogram 1, with a view to facilitating repo activity and deepening liquidity in the secondary government bond market. Parallel initiatives to increase the liquidity of Shariah-compliant products are also slated. Support for both the Shariah and conventional market initiatives will require amendments to tax and accounting standards. These are scheduled under Subprogram 2.

38. Finally, output 2 features several miscellaneous issues to deepen markets. They target the standard of risk management in the insurance sector and access to the primary bond market

for municipal authorities. OJK is also working to raise participation in capital markets for social security agencies by upgrading their risk management frameworks.

39. **Output 3** is designed to improve access to the financial system. One of its core themes is microfinance. OJK aspires to expand microfinance across both the Sharia and conventional systems. The planned establishment of a microfinance Center (Subprogram 2), is expected to lead (in Subprogram 3) to a regionally recognized Center of excellence.

40. Distribution channels for banks are also being expanded. OJK has already authorized the range of sales agents for investment products and, in Subprogram 2, it will be investigating the scope for branchless banking.

41. Financial literacy is also targeted under the Program. Indonesia's geography and low levels of general literacy make financial awareness a formidable but important task. OJK has already conducted training and awareness programs in 24 cities, and it plans to extend the reach of these during both remaining Subprograms. It will also be running 'train-the-trainers' programs, developing a financial literacy database, and better establishing responsibilities for financial inclusion among all affected authorities.

42. The final target of the scheme is investor protection. OJK has already granted, under Subprogram 1, a license to the Securities Investor Protection Fund (SIPF) to protect investors against misuse of funds by custodians. Self-regulatory organizations contribute premia on a set scale to the SIPF, and OJK will be aiming to ensure that licensee's viability in the course of Subprogram 2. OJK has also launched a Financial Customer Care initiative and will, under Subprogram 2, develop better dispute resolution mechanisms for banks.

IV Estimations of the Benefits and Costs of the Reforms

43. The following table summarizes the main features of the reforms that the staff have identified for the Program. These benefits are not exhaustive, but provide an indication of the key aims. Overall, the reforms are estimated to produce benefits of around 403 million annually for the first five years.

	Enabling Outputs			Summary of economic impact
Name of reform	**Output 1**	**Output 2**	**Output 3**	
Creation of OJK	*			Savings generated through greater systemic stability and more credible regulation are likely to accrue through lower interest rates. Costs of approximately $316million are incurred in the first two years under output 1, plus IT costs for both the private and public sector of approximately $36million, and $20million in expanding infrastructure for financial stability.
Financial stability strengthened	*	*		Savings to government of $246million per annum accrue through lower debt-service costs as perceptions of financial stability improve (output 1).
Bond markets improved	*	*		Improvement in liquidity conditions in conventional bond markets ease liquidity conditions and improve bank profit by $24million per annum (output 2). Maximum uplift will be facilitated by better government bond pricing that are expected under output 1. Reductions in spreads save sukuk issuers $4.5million per annum (output 2), and

				market growth saves a further $36million per annum to new issuers (output 2).
DSIB charges		*		DSIB capital charges deliver greater stability but lower bank returns at a cost of between $171million and $233million (output 2).
Financial inclusion	*		*	Higher rates of financial inclusion are achieved by raising financial literacy, improving product distribution channels and establishing branchless banking. Greater financial stability supports these initiatives. Costs of around $12million (output 3) are incurred by government. Total benefits are estimated at an average of $92million per annum over the first five years (output 3).

V. Methodology

44. Most of the benefits of the reforms accrue as lower costs to government and other users of the financial system. Improvements to the efficiency of a market involving interest rates can generally be measured in terms of basis points, and they can be applied either to an existing, or target, stock of assets or liabilities.

45. Most costs for the reforms can be expressed in terms of time-and-materials. Many of the initiatives impose costs through new infrastructure requirements, and there is relatively little implied economic displacement or redistribution of income through the taxation system.

46. A more customized approach is needed for the cost of the BCBS D-SIB provisions. Their implied subtraction from shareholder wealth can be approximated by applying the existing rate of return on equity to an estimate of the volume of risk-weighted assets involved.

47. Where a cost has both recurrent and fixed components, the recurrent component has been absorbed by discounting the future flow of expense in perpetuity at the current government bond rate of 8%.

48. The table below summarizes the assumptions used for this PIA.

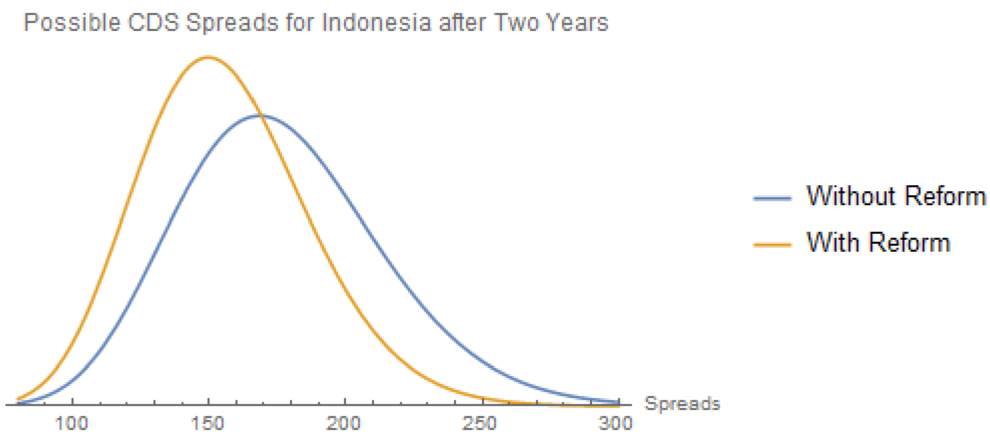
Output	Issues	Assumptions Used
Output 1	Correlation between CDS and bond yield.	Reduction of CDS spread of 20 basis points may result in lower bond yields by the same percentage making it cheaper for the government to raise capital.
		The benefit would also pass through to corporate bonds yield making it cheaper for the private sector to raise capital.
	Cost of setting up OJK.	Total cost based on government budget allocation is $316 million. Although some of this funding is to replace functions that were carried out by previous regulators in particular BAPEPAM, it is assumed that the transfer of responsibilities has logistical costs for both government and the supervised firms which need to adapt to it.
Output 2	Benefit of bank’s	Assumption based on government bond rates of

	liquidity earning average lending rates instead of government bond rates.	8% and average lending rates of 11.7% resulting in differential of 3.7% or 370 basis points.
	Benefit in reduction of spread between sukuk and corporate bonds.	Reforms in sukuk market may lead to narrowing of spread by 5 basis points from 45 basis points. With sukuk outstanding of $9 billion, this may result in potential benefit of $5 million.
	Benefit in issuance of new corporate sukuk	Reforms is sukuk market may result in higher corporate sukuk issuances, which may result in lower cost of raising capital by 60 basis points or 0.6%.
Output 3	Financial literacy and wealth generation	Better financial literacy may result in 0.4% of population generating wealth through more investment
	Access to financial services and wealth increase for the poor	Better access may result in percentage of the poor saving $10 per annum in basic banking accounts.

VI. Benefits

49. Quantifiable benefits under **output 1** are estimated to be worth $246 million per annum. They consist of a $212million reduction in Government debt service costs and a $34million reduction in corporate debt service costs. These gains would be back-loaded, and they are likely to begin flowing toward the end of the Program.

50. The reductions effectively flow from a reduction in credit risk premium. The Government is currently paying a much higher credit spread for its borrowing relative to its East Asian peers. Modernizing the prudential framework and creating proper mechanisms for financial stability will lower that risk and reduce borrowing costs. The likely range of benefits is between $106million and $530million, corresponding to reductions in credit spreads of between 10 and 50 basis points. The central case assumes a fall of just 20 basis points which, at the current stock of local currency government debt, would equal around $212million per annum. A further $34million per annum would accrue to the corporate sector if the improvements were fully passed through to corporate spreads. The following chart shows the estimated pattern of spreads as a probability distribution. The curve which assumes ‘no reform’ is estimated from the history of spreads. Being flatter and further to the right than the curve ‘with reform’, it has spreads which are higher on average, and less certain, and more widely dispersed. The table below the chart highlights the sensitivity of the projected savings to alternative spread outcomes.



Benefits from a lower credit risk premium
(annual efficiency dividend in USD millions)

		Size of reduction in credit spread		
		10bps	**20bps**	**50bps**
Sector	**Government**	106	212	530
	Corporate	17	34	85

51. The incidence of these returns is likely to fall across the entire income distribution spectrum. Those at the upper end will benefit from the reduced taxation burden that accompanies lower government debt service costs. Those at the bottom end will benefit, to a less quantifiable extent, from the improved macroeconomic conditions that are likely to result. Reduced corporate and government borrowing costs should be conducive to higher levels of economic activity and, more importantly, lower levels of inflation. Since inflation disproportionately harms those on non-indexed incomes (ie. the poor), initiatives which reduce it alleviate poverty.

52. Total recurrent benefits under **output 2** are expected to be $65million, and they will flow from reduced levels of liquidity after reform of the bond markets. The first component ($24million) is a revenue uplift to banks, as reform to the repo markets and the introduction of the GMRA allows a reduction in liquidity levels. The benefit has been calculated by assuming that 1% of funds currently held as liquidity reserves by commercial banks are earning the government bond rate, and could be released into the market to earn average lending rates. The outcomes of some alternative assumptions appear in the table below.

Benefits of Reduced Liquidity (annual efficiency dividend in USD millions)				
		Spread of lending rates over government bond rates		
		180bps	370bps	500bps
Incremental liquidity reductions	**0.5%***	59	120	163
	1.0%	12	24	33
	3.0%	35	72	98

53. Further benefits could flow from the improvements in the sukuk market in Subprogram 1. Reducing legal risk to sukuk holders by clarifying their rights should reduce the cost of borrowing. Ten-year sukuk have traded at an average discount to conventional bonds of 45 basis points since 2011. With outstanding sukuk issuance in the market of around $9billion, a 5 basis point narrowing of this spread would generate savings of around $5million per annum.

54. Reforms to the sukuk market could also yield a recurrent benefit of around $36million per annum if the ratio of corporate, to total, sukuk can be aligned with Malaysian levels though an expansion of corporate issuance. At current issuance levels, this would require new corporate sukuk stock of $6billion. The implied saving to borrowers on that issuance can be approximated as around half the 120 basis point spread between average bank lending rates (11.7%) and recent sukuk yields (10.5%).[3]

55. The benefits of greater financial inclusion under **output 3** are estimated to be worth a cumulative $458million over a 5 year period. The first uplift, of $422million, benefits those in the middle of the income distribution spectrum, and it is due to improvements to financial literacy, and better access to financial services under Subprogram 1. Financial wealth in Indonesia is estimated to have been growing at a rate of around 24.1% per annum, and it is currently at $778 per capita.[4] If microfinance measures could make a return of 10% accessible to an extra 0.4% of the population (835,000) who hold the mean wealth endowment, the implied increase in nominal wealth over a five-year period would be $422million. Other scenarios, for different rates of return and rates of uptake, are described below.

[3] The benefit calculation assumes that issuers would have relied on bank credit, absent the reforms. Halving the spread of bank lending rates to sukuk yields imparts a conservative bias to the calculation. It reflects the likelihood that sukuk issuers will generally be of much higher quality than the average bank borrower and so would not pay the average lending rate of interest.

[4] Allianz Global Wealth Report 2014

Financial Inclusion Scenario Analysis:
Nominal Wealth from a $778 average endowment
(Increase in USD millions after five years)**

		Rate of return		
		8%	**10%**	**12%**
% of population benefiting from uplift	**.3%***	240	316	401
	.4%	320	422	535
	.45%	360	475	601

56. The second uplift of $36million follows from securing better access to very basic banking products for those on much lower incomes. The following table gives a sense of the increase in aggregate wealth that would occur at current rates of interest over a five year horizon under different assumptions about the number of extra people using the financial system and the amount that they could invest.

Nominal Wealth Increase
(USD millions after five years of investment)**

		Size of Investment ($pa)		
		5	**10**	**12**
Number of extra investors (millions)	**4.2**	10	21	25
	7.3	18	36	43
	8.4	21	41	49

57. Other, less quantifiable, benefits will also flow to the lower end of the income distribution spectrum from the improvements in dispute resolution and better surveillance of service providers. OJK has initiated more efficient, lower-cost alternative dispute resolution mechanisms across all financial sub-sectors within its remit. The response to its Financial Customer Care Initiative and the uplift in the SIPF indicate that these are already earning community recognition.

VII. Costs from the reforms

58. Many of the costs of these reforms will be administrative. That is, they involve the improvement of processes and systems, as well as incremental spend on headcount. The Program imposes relatively fewer costs in terms of fiscal redistribution or dislocation of existing enterprises.

59. Total costs under **output 1** are estimated by to $371million. The main expense is building the new prudential regulator. The national budget allowed $183million for this purpose in 2014 and $133million in 2015.

60. The costs of developing the Center for Financial Sector Policies can be approximated through wages. Assuming that the World Bank and IMF will contribute as much as the Australian Government and ADB, and assuming also an equal total co-contribution by the Indonesian government, the overall cost of the setup would be approximately $4million. Recurrent costs can be approximated in terms of staff wages. Assuming headcount of 30 and average wages of $36,000 per annum, this expenditure is around $1million per annum. Present valuing this flow at the current government bond rate of 8%, and then adding the setup costs, yields a total present-valued cost for the Center of around $17million.

61. Crisis management planning is likely to have comparatively high administrative costs, due to the high number, and seniority, of staff involved. Again assuming wages of $36,000 per annum, and assuming FTE of 20 staff across the different ministries affected returns a cost of $720,000 in the first year. Recurrent support for the function would take the present value of the cost to around $1.5million.

62. OJK's IT costs for improving data collection architecture will also be expensive. Based on scope, the project will probably have a total cost of around $18million. This will consist of initial set up costs of around $10million and present-valued recurrent costs of $8million, based on incremental resources required to maintain systems and ensure quality of data production and reporting.

63. In addition to the costs faced by OJK in the redesign of IT systems, the private sector will face costs of adapting systems to the new reporting requirements. These costs will remain indistinct until the new data requirements and reporting arrangements are in place. But OJK supervises a wide range of institutions, and it seems reasonable to assume that aggregate private sector costs are comparable to those faced by OJK itself.

64. Recurrent costs under **output 2** are expected to total between $171million and $233milliion, with a fixed cost of $10million. The major cost arises in Subprogram 1 and is due to the imposition of a D-SIB capital charge. The applicable capital charge for D-SIBs is likely to be 1% of risk-weighted assets. The authorities have not yet designated D-SIBs. But applying the regulation to the top nine largest banks by assets, and then setting the cost equal to the system-wide average rate of return on adjusted equity of 12%, implies costs to shareholders of $233million per annum. Concentration in the industry is such that restricting the application of the regulation to the top four banks would still imply an annual cost of $171million.

65. Most other costs under output 2 are administrative and likely to total around $10million. Based on ADB contributions, the cost of implementing the scorecard has been estimated at around $1million. Recurrent costs of maintaining this scorecard are thought to be around half that value, implying present value of around $7million. The initial costs of adjusting laws to improve the legal status of sukuk are probably a further $2million. Costs of participation in the FSAP are likely to be around $0.5million.

In **output 3**, costs are likely to total around $12million. Most are administrative and small relative to those incurred in outputs 1 and 2. The main cost is the establishment of a microfinance Center, which could have an initial cost of around $3million, and an ongoing cost (present-valued) of a further $3million. The seed funding for the SIPF of $3million is also significant. Among the other costs, financial literacy initiatives are perhaps the largest, at an estimated $0.5million per year.

Table Summary Program Impact Assessment

The Program will contribute to financing of investment and therefore economic growth in the short to long term..

Channel of Effect		Impact on the Sector/Economy		Estimated benefits, beneficiaries and benefactors
General	**Specific**	**Short to medium Term**	**Long Run**	
Improved conditions for financial stability	Establishing OJK as the integrated prudential regulator.	Startup costs, including creation of new organization, transfer of responsibility, improving inter-agency co-operation, running crisis management exercises etc.	Stronger perceptions of Indonesia's financial stability arrangements and the quality of its financial institutions. Borrowing spreads contract and Indonesians can borrow more profitably.	In the short run, taxpayers need to fund the initiatives. Over the longer term, costs (of a lower order) accrue to industries as a transfer to levy-based funding takes place. Benefits are difficult to quantify, but possibly around $246million per annum for the government and $65million per annum for the corporate sector.
	IT migration and uplift	Main costs are costs to the government of IT overhaul and uplift. Some costs of adaptation incurred by the private sector.	Better data for monitoring both individual institutions and the overall health of the financial system. Costs of maintenance revert to industry via the levy system.	Short run costs accrue to taxpayers and then industry (via the levy system). Benefits are longer term and include the reduction in borrowing costs that flows from stronger market perceptions of Indonesia's financial system.
	D-SIB Capital charges	Designated major banks hold an increase in capital at the expense of shareholders	Creditors of the banks benefit from the reduction in leverage and risk, and bond prices are higher than otherwise.	In the short run, losses accrue to shareholders. Some benefits may accrue to bondholders, if the bank is deemed more stable at higher capitalization levels. In the long run, reductions in leverage of the financial system should reduce borrowing costs and lower the contingent liabilities of taxpayers.
Better governance	ASEAN CG Scorecard	Small fiscal costs in setting up and maintaining governance arrangements.	Increased global appetite for Indonesian financial assets. Better terms for equity and bond issuers	The main beneficiary in the longer run is the corporate sector, and the main benefactor is the external sector
	OJK whistleblower protection and other governance reforms	Small fiscal costs in setting up and maintaining governance arrangements.	Increased global and local appetite for Indonesian financial assets. Better terms for equity and bond issuers	

Channel of Effect		Impact on the Sector/Economy		Estimated benefits, beneficiaries and benefactors
General	**Specific**	**Short to medium Term**	**Long Run**	
Bond market reform	GMRA	Nil. Markets will take some time to develop.	Deeper secondary markets lead to lower levels of excess liquidity; NIM levels drop to around	Beneficiaries include borrowers, who should benefit from more efficient banking operations. Primary and secondary market dealers in government securities also benefit. There are no significant long run costs.
	Sukuk market reform	Government benefits from lower costs of debt finance	Costs for corporate borrowers fall	Cost savings on debt for the public sector and the private sectors. There are no significant benefactors for this initiative.
Access to retail products	Improved distribution channels for financial products	The costs of disseminating new standards and establishing microfinance support and new distribution channels for wealth management products are incurred by the government;	Higher rates of return on individual wealth accruing to households are the main benefit.	Individuals, and especially lower income earners, are the main beneficiaries. There are no significant costs in the long run.
	Extension of basic financial services to the poorest 40%	Costs to government of raising financial literacy	Benefits to lower income earners from rates of return that are indexed to market returns.	

ADB = Asian Development Bank, ASEAN = Association of South East Asian Nations, CG = corporate Governance, OJK = Otoritas Jasa Keuangan.