PROGRAM IMPACT ASSESSMENT

I. Introduction

1. This program impact assessment (PIA) estimates the potential benefits to the economy arising out of the Inclusive Financial Sector Development Program (IFSD). The framework used for the PIA draws on the regulatory impact assessment tool used by governments in over 50 countries to systematically identify and assess the expected benefits and costs of proposed regulatory reforms. The PIA framework defines the sector challenges, defines IFSDs expected impact and outcome, analyzes and identifies the options for achieving the expected outcomes, and assesses the benefits and costs of the proposed program. The PIA also discusses the pro-poor features of the program and describes the transmission by which the IFSD will contribute to poverty reduction in the short to medium-term.

II. Overall Conclusion

2. The results of the PIA indicate that the IFSD could produce potential gains to the economy amounting to $391.2 million annually or 2.3% of gross domestic product (GDP). These gains arise primarily from two channels. First, IFSD will increase the average annual volume of banking loans which, when combined with the expected reduction in interest margins, will add $230.1 million to GDP annually. In addition, reforms under IFSD will help reduce interest margins in the microfinance sector by at least by 6.0% which, along with increased lending and deposit mobilization, will shift borrowers out of more expensive informal lending schemes. This channel could add as much as $161.1 million to GDP annually. These estimates ignore potentially larger, second-round effects such as increased investment arising from increased mobilization of savings and the lower cost of capital, and increased employment within and outside of the sector. The benefits from the proposed reforms exceeded the costs of the investment costs of $140 million and the recurrent costs of $5 million.

III. The Developmental Impact of the Program

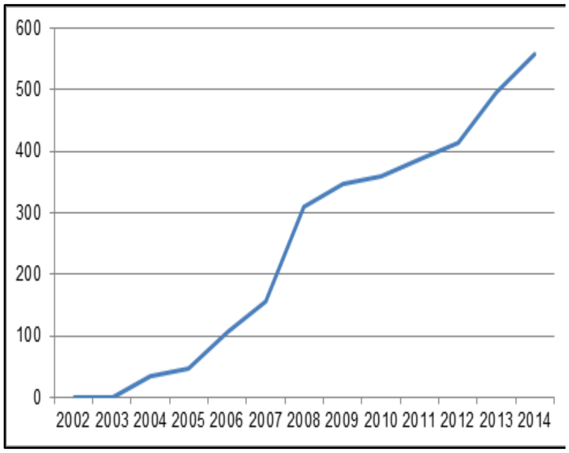
3. This section summarizes the challenges, identifies the intended impact and outcome of the proposed IFSD, reviews available options, and estimates of the potential net benefits of IFSD.

A. Financial Sector Challenges

4. Cambodia is now leaving the post-conflict era and faces the dual challenge of further developing the financial sector to support private sector led sustainable economic growth while striving for monetary policy independence. Cambodia's history and current business model, which is reliant on U.S. Dollar based foreign direct investment and U.S Dollar revenues, has left the financial sector highly dollarized and fragmented. Thus, the central bank has only limited measures to implement its monetary policies and manage inflation, and would be challenged to provide dollar-based liquidity as a "lender of last resort." Moreover, the financial sector has been growing significantly, although from a small base. Currently, the banking industry dominates the financial sector, accounting for more than 90% of total financial sector assets. The cost of credit is high and the banking sector itself is both concentrated and fragmented between urban and rural areas. As such, measures to increase efficiency, and to broaden financial inclusion in the context of rural areas, the agriculture sector and small and medium-sized enterprises, represent

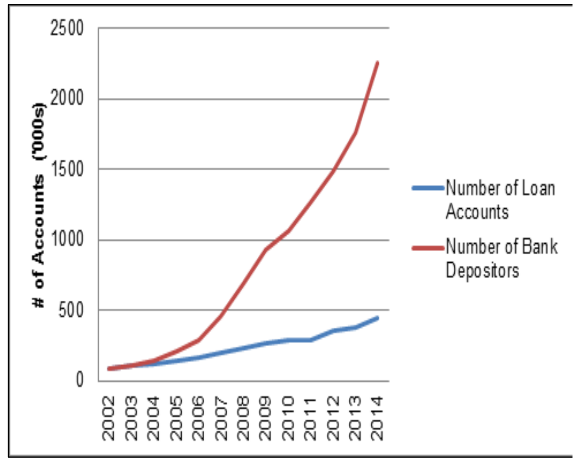
dual priorities. The nonbanking sector and capital markets, on the other hand, are at an early stage of development and do not yet have significant macroeconomic impact.

Figure 1: Number of Bank Branches



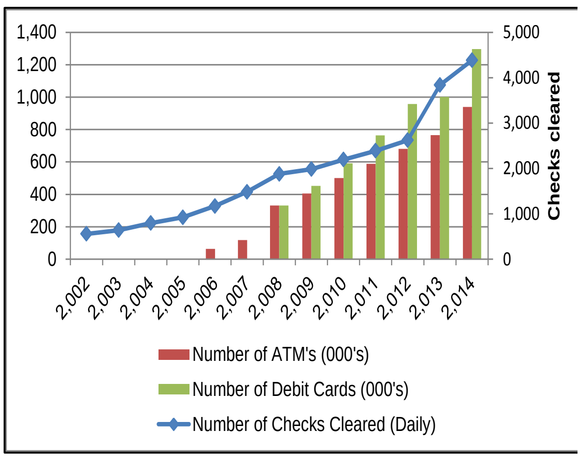
Source: National Bank of Cambodia and ADB staff estimates.

Figure 2: Number of Bank Loans and Deposits



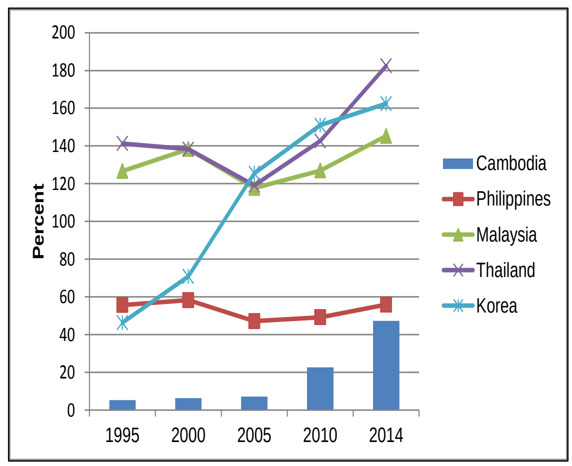
Source: National bank of Cambodia

Figure 3: Banking Product Depth



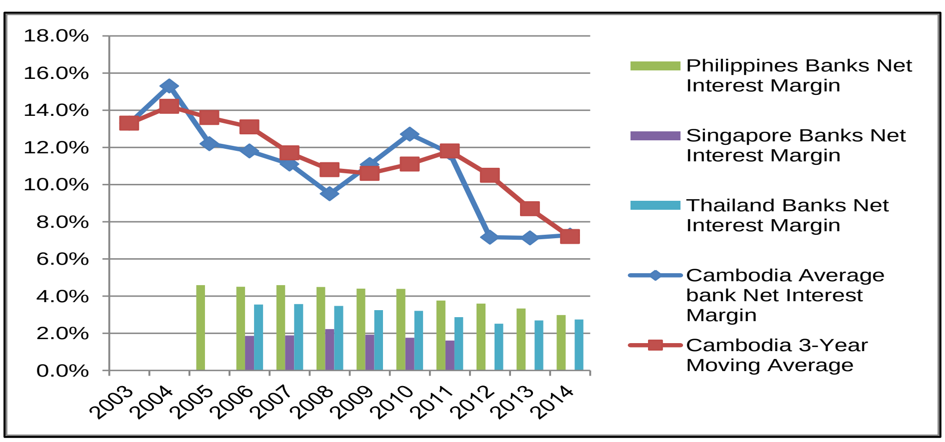
Source: National Bank of Cambodia and ADB staff estimates.

Figure 4: Domestic Credit by the Banking Sector



Source: Asian Development Bank.

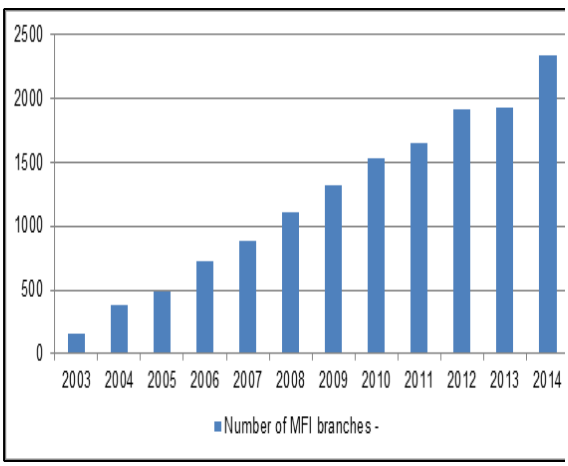
Figure 5: Net Interest Margin



Source: National Bank of Cambodia, Bangko Sentral ng Pilipinas, Bank of Thailand, World Bank Financial Sector Database.

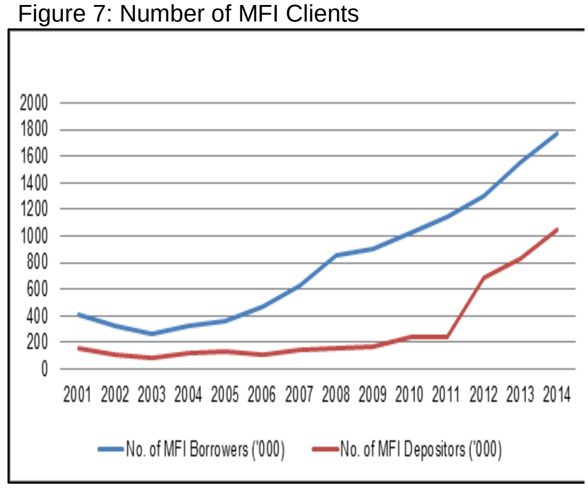
5. Cambodia's financial sector has grown exponentially during the period 2005 to 2015. There are now 36 banks operating in Cambodia which, when coupled with a rapid pace of branch expansion, have increased the number of banking offices to over 550. The number of depositors in the banking system has more than doubled to over 2 million by 2014 from 1 million in 2010 and the number of loan accounts has nearly doubled over the same period (figure 2). The penetration of key banking products, including checks, debit cards, and ATM's has also been impressive (figure 3). In contrast to neighboring economies there is very limited state ownership in the Cambodian banking subsector. Thus, the banking system has benefited from significant foreign investment and this has helped intensify competition and accelerate the diffusion of technology and innovations. This competition, innovation (introduction of automated teller machines and debit cards, for example), and improvements in the payments system (reflective of increased and timely check clearances) have improved the banking sector's operational and allocative efficiency. Nevertheless, domestic credit provided by the banking sector, relative to GDP, remains well below Cambodia's regional peers (figure 4). While there have been improvements in financial sector efficiency, as reflected in a long term decline in average interest margins, credit costs and net interest margins remain well above comparable peers (figure 5).

Figure 6: Number of MFI Branches



Source: National Bank of Cambodia.

Figure 7: Number of MFI Clients



Source: CEIC and ADB staff estimates.

6. In the microfinance sector, positive trends are also noted with the number of micro finance borrowers nearly doubling to almost 1 million from 2010 to 2014 (figures 6 and 7). The value of outstanding microfinance loans has increasing fivefold to reach $2,017 million, and the number of depositors has increased 400% over the same period.

7. Nevertheless, intermediation remains low and inefficient which inhibits efficient investment and broad-based economic growth. Development of the financial sector faces serval challenges. First, transaction costs associated with financial intermediation remains high due to an underdeveloped payment system and the lack of comprehensive credit information. In general, credit risk management skills are under-developed and costs of borrowing in local currency, which is preferred in the rural areas, is prohibitive. This has contributed to a bifurcated market wherein credit is readily available in urban areas and scarce in rural areas. In 2015, a comprehensive demand study estimated that only 17% of population has access to finance –

30% in urban areas and only 12% in rural areas where 75% of the population resides.[1] In fact, While Cambodia's economy is primarily rural (85% of the population lives in rural areas), the study indicated that 30% of rural populations do not have access to either formal or informal financial services. The government recognizes these impediments and their impact on the poor and has implemented a series of reforms over the last decade to develop the financial sector, increase inclusiveness and enhance stability. The government's short, medium and long term goals and road map for the financial sector are detailed in its 10-year rolling Finance Sector Development Strategy (FSDS), which is being updated as the FSDS 2016–2025.

B. Impact and Outcome

8. The program is aligned with Cambodia's updated National Strategy and Development Plan, 2014–2018 and Rectangular Strategy as well as the FSDS, 2016–2025. The outcome will be a growing, resilient, and efficient financial system with expanded coverage.

C. Outputs

9. The IFSD draws on the Asian Development Bank's experience with financial sector development in the region and in implementing the previous programmatic approaches in Cambodia.[2] IFSD will provide support to long-term sustainable development of the financial sector aimed at promoting economic growth, creating jobs, increasing inclusiveness, and ensuring the effectiveness of public institutions. The program will apply sequenced reforms to; (i) expand access to finance with an emphasis on rural areas, the agriculture sector, and SME's in coordination with the national strategy for financial inclusion, (ii) enhance financial sector stability and confidence by supporting the development of institutional arrangements including crisis management protocols, the establishment of government bond market, consumer protection mechanisms and enhanced governance in terms of anti-money laundering, and (iii) develop the legal foundation and infrastructure to support the introduction of new financial products and services.

D. Impact Analysis

10. This section presents estimates of the economy-wide benefits and costs of IFSD. The immediate direct benefits arising from reforms implemented under IFSD are the savings to investors, borrowers and households from lower borrowing costs and from the wider variety of financial products which would be available to increase income and wealth.

1. Estimating the economy-wide gains from the IFSD

11. Distortions in Cambodia's financial system impose several types of costs on the economy that could reduce long-term economic growth. The first is the cost of operating inefficiencies. Channeling funds from savers to borrowers has a cost in every financial system. However, this cost is higher in financial systems where i) the payment system is underdeveloped and relatively more costly to operate, ii) the corporate governance environment

[1] United Nations Capital Development Fund. 2015. *FinScope Consumer Survey 2015*. Phnom Penh.

[2] ADB. 2001. *Report and Recommendation of the President to the Board of Directors on a Proposed Program Loan Cluster to the Kingdom of Cambodia for the Financial Sector Program.* Manila, and; ADB. 2007. *Report and Recommendation of the President to the Board of Directors on a Proposed Program Loan Cluster to the Kingdom of Cambodia for the Second Financial Sector Program.* Manila; and, ADB. 2011. *Report and Recommendation of the President to the Board of Directors on a Proposed Program Loan Cluster to the Kingdom of Cambodia for the Third Financial Sector Program.* Manila.

that is evolving, and iii) equity and core financial markets are absent. Reforms in these areas can raise the operating efficiency of intermediation, and the cost savings are passed to households as higher return on savings and to investors in the form of a lower cost of capital.

12. In the case of Cambodia, the major inefficiencies in the banking subsector appear to be operational, arising from the underdeveloped payment system and absence of core financial markets such as an inter-bank credit market, money market, bond and equity markets. Allocative inefficiencies are a lower order problem as the banking system is relatively open to foreign investment. Further, there is no significant state ownership of the banking subsector and as such, the directed lending and anti-competitive practices common in some neighboring countries appear to be absent. Further recent reforms have removed restrictions on MFIs regarding branching and deposit mobilization. Reforms focusing on improving the operational efficiency of the banking system and the MFI subsector, strengthening prudential regulations, and providing an appropriate incentives framework would reduce the costs of intermediation and enhance efficiency thereby deepening and diversifying the financial sector.

13. In fact, studies have established a clear, positive linkage between financial development, and more specifically growth in bank credit relative to GDP, stock market liquidity relative to GDP, and the overall rate of economic growth. Specifically, growth in bank credit and the traded value of the stock market positively predict growth, capital accumulation and productivity improvements even after controlling for economic and political factors. Countries such as Indonesia which experience lagging or below average levels of bank credit and stock market liquidity also report below average levels of GDP growth. This observation is confirmed by a study by Robert G. King and Levine (1993) that showed the level of financial intermediation is a good predictor of long-run rates of economic growth, capital accumulation, and productivity improvement.[3] Ross Levine and Zervos (1998) also demonstrated that stock market liquidity and banking development both positively predict growth.[4] Although the two analyses confirm financial sector development does impact growth, the impact on growth from stock markets and bank credit varies from one country to another country.

Table 1: Cambodia: Potential Economic Gains from Financial Sector Reforms and Contribution from the IFSD

	Short to medium term gains under the IFSD [a]	**% of GDP**
1. Improve banking subsector efficiency resulting in reduced interest margin	$230.1 million	1.3%
2. Improve MFI subsector efficiency resulting in reduced interest margin	$161.1 million	1.0%
Total Gains	**$391.2 million**	**2.3%**

[a] This refers to estimates of potential gains from the IFSD program. The interest margin is expected to decline while the level of loan stock will rise during the program period.
Source: ADB staff estimates.

14. Table 1 presents some quantifiable (gross) gains to Cambodia from the reforms to be implemented under IFSD. These reforms are focused on improving efficiency and enhancing inclusive access to more affordable products and services from the formal financial sector. Such

[3] 1993. World Bank. Working Paper Series 1083; Finance and Growth-Schumpeter Might Be Right. Washington DC.
[4] Ross Levine, Sara Zervos. 1998. Stock Markets, Banks, and Economic Growth. *The American Economic Review.* 88 (3). pp. 637–558.

reforms could create *direct* gains in the order of $391.2 million at the completion of the Program, or about 2.3% of GDP equivalent. The potential gain comprises reduced interest margins from the private loans of the banking and MFI subsectors. The estimated figure ignores the potentially larger, second-round effects such as increased investment arising from increased mobilization of savings and the lower cost of capital, and increased employment within and outside of the sector. These benefits are derived via two primary channels.

15. **Improved banking efficiency.** The average annual volume of banking loans combined with the expected reduction in interest margin will add $230.1 million to GDP annually. It is expected that interest margins will continue to narrow by almost 2% between 2014 and 2020 as these reforms lock in efficiency gains and the level of bank lending increases to at least 80% of GDP at the conclusion of the IFSD. The average bank loans ratio against GDP ($16,852 million in 2014) between 2014 and 2020 would be 68.5%. Specific reforms and measures that support this estimate include: i) an improved payments system, ii) the development of inter-bank, money and securities markets, and iii) strengthened corporate governance which will provide the incentives framework through which banks and other financial institutions would lower the cost of intermediation which is reflected in narrowing net interest margins.

16. **Improved MFI efficiency.** IFSD could add as much as $161.1 million to GDP annually. Reforms under IFSD will help reduce interest margins at least by 6.0% and increase lending, deposit mobilization and shift borrowers out of more expensive informal lending schemes. This assumption is based on achieving a 10% annual growth rate in MFI loans from $2,017 million in 2014 to $2,684.6 million after 3 years. In particular, IFSD will support measures that expand the outreach of MFIs and improve their operational efficiency. In turn, this will increase access to finance for micro and SME enterprises and lower the cost of intermediation in this sector.

17. **Costs of the reforms.** The reforms will entail some costs which will be more than offset by the benefits. Foremost among them is the cost to taxpayers of recapitalizing the Rural Development Bank ($26 million). In addition, direct budget support will be required to upgrade the clearing and settlement system to a Real Time Gross Settlement System (RTGS) and to fund a guarantee scheme for SME's. Most other costs relate to the costs of implementing the reforms under IFSD. For example, additional costs will be incurred over the medium-term as the government restructures the Rural Development Bank and expands its product line. In addition, costs will be incurred as government agencies draft laws and regulations, develop coordination systems, and strengthen regulation and compliance, and conduct surveys and data gathering activities. Although these costs are not inexpensive in themselves, they are small relative to the prospective benefits for this particular Program. The estimates of the costs are indicated below.

Category	**Contents**
Investment and Administrative Costs ($140 million)	(i) Investment costs (total $130 million) in upgrading the payment system ($20 million), establishing the depositor's protection scheme ($30 million), establishing the government bond market ($20 million), and introducing the SME credit guarantee scheme ($30 million) and restructuring RDB ($30 million), (ii) Administrative costs (total $5 million) in amending the existing laws and drafting new regulations and circulars, enhancing EA/IAs technical capacity, and public education and dissemination of new policies

Category	Contents
Recurrent and Enforcements Costs ($5 million)	Additional institutional capacity in supervising the industries, and enforcing newly enacted laws and prudential regulations

Source: ADB staff estimates

E. Contribution to Poverty Reduction

18. IFSD is expected to reduce poverty and inequality through the creation of direct and indirect benefits to poor households. Specifically, IFSD will contribute to a sustainable reduction in poverty in the short and medium-term through two channels. The first channel is through higher and sustained long-term economic growth. The development of banking and financial market infrastructure and introduction of new products will contribute to greater financial sector deepening and diversity. In turn, this will reduce operating inefficiencies which will increase domestic financing of public and private investments, resulting in higher economic growth. The second channel is through inclusiveness of the poor in the formal financial sector. By allowing MFIs to mobilize deposits, enhancing the prudential supervision of MFIs, and improving public awareness of financial products, the savings rate and interest income of poor households and their access to credit will increase over time.

Table Summary Program Impact Assessment

These are costs and benefits of the major policy initiatives under Subprogram 1. They include observations on some of the less readily quantifiable effects. Full descriptions of the initiatives are contained in the policy matrix for the program.

Channel of Effect		**Impact on Sector/Economy**		**Estimated Benefits, Beneficiaries and Benefactors**
General	**Specific**	**Short to Medium Term**	**Long Term**	
Expanded access to formal financial services to the poor (Output 1)	Diagnostic demand-side survey for financial inclusion Capital support for RDB Further processing of Consumer Protection Law	Clear policy direction for financial inclusion Increased lending capacity of RDB Policy direction for consumer protection	Reduction of poverty through financial inclusion Promotion of agriculture sector development Efficient and reliable financial products and services	Current unbanked population will gain the access to finance and expansion of formal financial products and services shifting from informal schemes will reduce the transaction costs, typically interest rates.
Enhanced financial sector stability (Output 2)	Information sharing among financial sector supervisors Studies on Deposit Protection Scheme Expanded NCDs market	Better alignment among financial sector supervisors Increased confidence in banking sector Better liquidity management of banking sector	Efficient coordination for policy actions for internal and external shocks Prevention of liquidity crisis in banking sector Efficient liquidity management in banking sector	More resilient domestic economy and financial sector in Cambodia against financial crisis
Upgraded financial infrastructure (Output 3)	Launch of retail payment system for local currency transactions Further processing	Efficient payment service for mass population, especially poor households	Promotion of use of local currency for retail transactions Vehicle for	Benefits will come from improved efficiency in terms of reduced fees and reduced margin in financial sector

Channel of Effect		Impact on Sector/Economy		Estimated Benefits,
	of Trust Law	Protection of assets and capital in financial sector	diversified financial products including the securitization	
	Further processing of e-Commerce Law	Legal platform to promote more efficient financial services	Further reduction of transaction costs and expanded access to finance	