



NATIONAL BANK OF CAMBODIA

Riel. Stability. Development.

FINANCIAL STABILITY REVIEW 2019

Macroeconomic Conditions
and Stability

Financial System Conditions
and Assessments

Macro-Financial Linkages and Potential
Risks to Financial Stability

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Foreword

In 2019, Cambodia's financial system has undergone several challenges from both external and domestic fronts. On the external front, the uncertain and prolonged trade tensions and the slower-than-expected growth in the Chinese economy have put a drag on global economic growth. This, in turn, has put downside pressures on Cambodia's economy that essentially relies on exports and tourism. Indeed, the growth rates of export and tourist arrival have weakened, and credit growth to manufacturing and tourism sectors has also shown a sign of slowdown in 2019. On the internal front, uncertainties over EBA withdrawal, the presence of direct mortgage lending by real estate developers without proper supervision, and rapid credit growth particularly to construction and real estate sectors were the areas of our concerns. Despite this challenging environment, Cambodia's economy maintained a sustainable growth rate at around 7%, with low inflation and stable exchange rate; the financial system also remained safe and sound, reflected by the expansion and deepening of banking sector. The robustness of the banking sector was the result of the cushion from healthy banks and financial institutions and the effectiveness of macroprudential measures in managing risks and strengthening the banking system.

In 2020, Cambodia's economy as well as financial sector have been facing high uncertainties. Due to COVID-19 outbreak, IMF revised down the global economy's growth from 3.3% to -3%, and Cambodia's economy is expected to contract with the main pillars of economic growth have been hit hard including tourism, export and construction. In this juncture, the NBC continues to be vigilant over the sectors that are mostly affected by COVID-19 and has been assessing financial institutions' liquidity management, capital adequacy and other risks by working closely with Association of Banks in Cambodia (ABC), the Cambodia Microfinance Association (CMA) and other related authorities and agencies. Since the Cambodia's banking sector has been well-capitalized and has had strong liquidity during the last decade, the financial system is expected to be resilient against major risks. In addition, the NBC has the policy spaces to manage adverse impacts on economic and financial sectors and remains watchful on the risks inherent in the banking sector as well as to support the Royal Government of Cambodia's measures to cope with these unprecedented shocks. However, dollarization is still the main structural challenge that limits the NBC's capacity to act as a lender of last resort and to enhance the effectiveness of monetary policy implementation.

I do hope that this Financial Stability Review would provide useful information about the current situation on Cambodia's financial sector development, potential risks and policy measures for policymakers and the financial industry with the ultimate goal of promoting financial stability in Cambodia. I would also like to take this opportunity to express my thanks and appreciations to all relevant stakeholders for their concerted efforts to preserve financial stability that so far has actively contributed to sustainable economic growth in Cambodia.

Phnom Penh, 22nd May 2020



CHEA CHANTO

Governor

National Bank of Cambodia

ABBREVIATIONS

ADB	Asian Development Bank
AFD	Agence Francaise de Developement
ATM	Automated Teller Machine
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BOP	Balance of Payments
Brexit	Withdrawal of the United Kingdom from the European Union
CAR	Capital Adequacy Ratio
CBC	Credit Bureau Cambodia
CCB	Countercyclical Capital Buffer
CSX	Cambodia Securities Exchange
EBA	Everything But Arms
ECB	European Central Bank
EMP	Exchange Market Pressure
EU	European Union
FCD	Foreign Currency Deposits
FDI	Foreign Direct Investment
FI	Financial Institution
FOB	Free-on-board
FSI	Financial Soundness Indicators
GDP	Gross Domestic Product
GFSR	Global Financial Stability Report (publication by the IMF)
GTF	Garment, textile and footwear
GTI	Grand Twins International
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
KHR	Khmer Riel Currency
LCR	Liquidity Coverage Ratio
LTV	Loan-to-value
MDI	Microfinance Deposit-Taking Institution
MEF	Ministry of Economy and Finance
MFI	Microfinance Institution
MLMUPC	Ministry of Land Management, Urban Planning and Construction
NBC	National Bank of Cambodia
NIS	National Institute of Statistics
NPL	Non-performing Loan
OECD	Organization for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PAS	Port Autonome de Sihanoukville (Sihanoukville Autonomous Port)
PPAP	Phnom Penh Autonomous Port
PPSEZ	Phnom Penh Special Economic Zone
PPWSA	Phnom Penh Water Supply Authority
RE	Real Estate
RGC	Royal Government of Cambodia
ROA	Return on Asset
ROE	Return on Equity
SQM	Square meter
TA	Technical Assistance
UK	United Kingdom
USD	US Dollar Currency
WB	World Bank
y-o-y	Year-on-year

EXECUTIVE SUMMARY

Weakening global growth momentum has weighted somewhat on external demand for Cambodia's goods and services. Exports of goods moderated slightly, but have become more diversified, driven largely by garment, footwear, electrical and vehicle parts. Trade balance remained in deficit due to higher increase in imports of raw materials – especially construction materials and petroleum, underpinning robust domestic demand. Meanwhile, tourism sector experienced a slower growth in the number of visitor arrivals, particularly from the last two quarters, mainly from China and other countries.

Accommodative global financial conditions have lent strong support to capital inflows, allowing the country to build up adequate international reserve buffer. Foreign direct investment (FDI) flows remained robust, which was sufficient to finance current account deficit, mainly to financial, construction and manufacturing sectors. China remained the leading source of FDI inflows, accounting for almost 50%. Gross external debt accelerated due to robust growth in debt of deposit-taking corporations while public external debt as share of GDP declined. External stability remains resilient with sufficient international reserve buffer, covering more than 8 months of prospective imports, which was above the standard benchmark of 3 months for developing countries.

GDP growth is estimated at 7.1% in 2019, largely contributed by the growth of construction and real estate sector despite slower growth of manufacturing and tourism sectors. Construction and real estate sector continued to expand rapidly and contribute mainly to economic growth, supported by both external funding, domestic credit and. Growth of people income. At the same time, inflation rate recorded at low level with stable core inflation and a decline in the prices of oil-related items. Meanwhile, the exchange rate of Khmer riel against US dollar remained stable, without facing any substantial pressure.

Dominated by commercial banks, Cambodia's banking system continues to maintain its resilience in terms of capital and liquidity and stable profitability. Banks maintained high and steady capital adequacy ratio at around 24% while the ratios for MDIs recorded at 16.2% and for MFIs at 34.9%. In terms of liquidity, banks and MDIs continue to maintain higher LCR than the requirement at 155.7% and 178.1% respectively. The banking system has been relatively profitable with banks' ROA measured at 1.9%, MDIs' ROA at 2.9% and MFIs' ROA at 2.2%.

Financial conditions have been accommodative, but the overall credit growth in the banking system remained high. By the end of 2019, credit growth in the banking system recorded at 25.5% picking up from 24.4% in 2018. Credit growth in MDIs and MFIs remains high while the growth in banks moderated. Total bank loans increased moderately to 23.7% by the end of 2019, same growth from 2018. Credit growth contribution was dominated by mortgage (4.4%), trade (retail and wholesale: 5.8%), real estate activities (3.2%), household consumption (3%), and construction (3%). However, the contribution of agriculture to credit growth remained low (0.4%) while manufacturing registered a negative contribution.

Going forward, the Cambodian economic and financial sector face several challenges and uncertainties due to the wide spread of the Covid19. Stronger concerns would emerge from the coronavirus that is negatively affecting global economic growth and the Cambodian economy would be also affected, particularly tourism and manufacturing sectors.

Moreover, the slowdown of China's growth would have negative effects on Cambodia's economy that has become more dependent on China in recent years. On the other hand, the European Commission has decided to partially withdraw EBA preferences that will require Cambodia to pay tariff for around 20% of its exports to the EU; thus, the impacts from EBA suspension are now lower than expected. Despite all of these risks, the banking system is expected to remain resilient due to strong capital buffers and adequate liquidity positions.

I. MACROECONOMIC CONDITIONS AND STABILITY

1.1 External Conditions and Stability

a) External Conditions

Global growth momentum weakened in 2019, mainly due to an escalation of trade tensions. The International Monetary Fund (IMF) has revised down the global growth projection to 2.9% in 2019. Heightening trade tensions between the world largest economies led to a sharp deceleration of world trade activities, causing a synchronized economic slowdown in both advanced countries and emerging and developing economies. At the same time, many economies in the region also experienced slower growth. For 2020, the IMF has warned that the global growth is expected to decline due to an outbreak of a novel coronavirus pandemic. Meanwhile, headline inflation in most economies generally remained subdued driven by the slowdown in economic activity and lower oil prices.

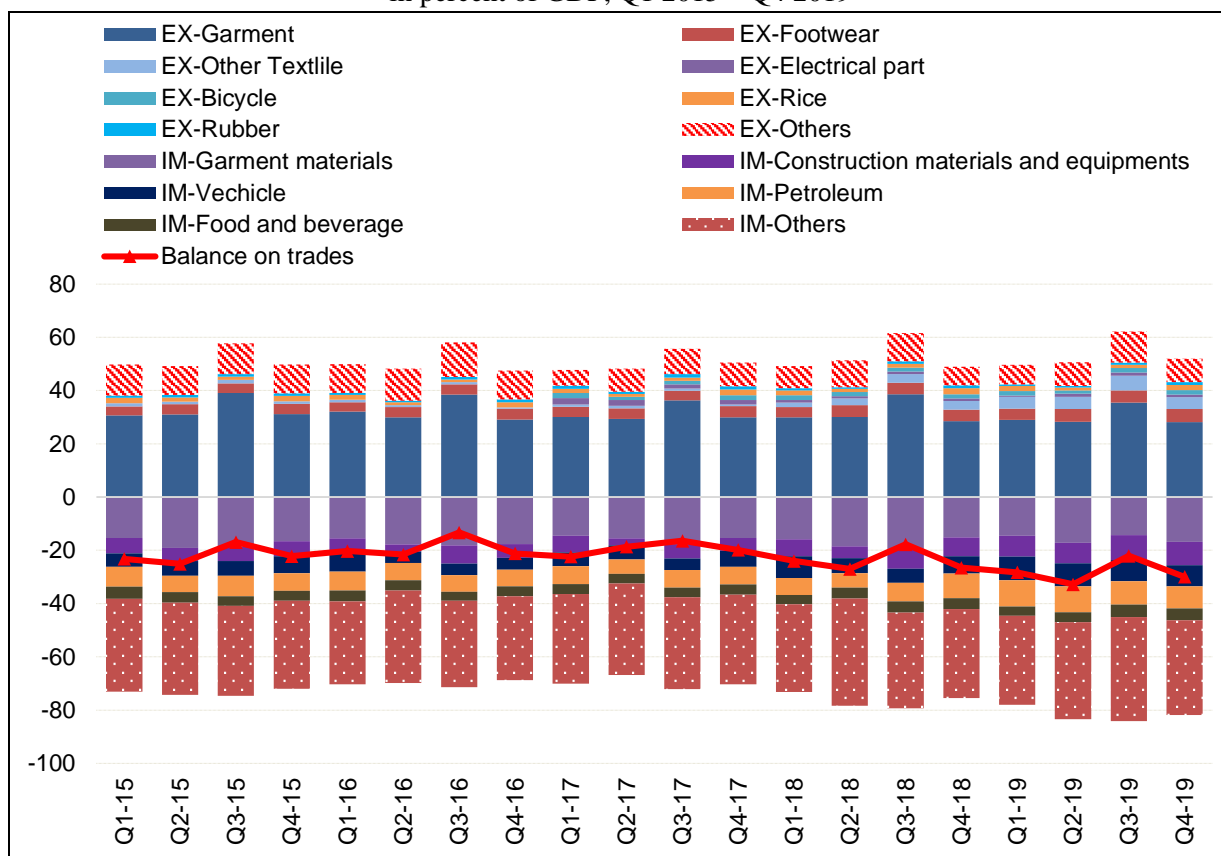
Global financial conditions in 2019 have been accommodative as most central banks have eased their monetary policy stances. The US Federal Reserve lowered its policy rate 3 times or 75 basis points while the ECB further reduced its deposit interest rate to a new recorded low level. Meanwhile, most central banks in the region, such as China, India, Indonesia, Korea, Malaysia, Philippines, Thailand, and Vietnam also lowered their policy rates – aiming to support growth during low inflation expectations. To support the recovery of economic activities from this health concerns, global financial conditions are expected to remain more accommodative in the short and medium terms.

b) Balance of Payments

- Trade

Amid weakening global growth momentum over the course of 2019, Cambodia's exports moderated slightly while trade balance remained in deficit due to higher increase in imports of raw materials – especially construction materials and petroleum. Exports of goods increased by 12.7% in 2019, compared to 15.5% growth in 2018, but have become more diversified, driven largely by garment, footwear, electrical and vehicle parts. Main trading partners as share of total exports included: United States (31%), European Union (26%), Japan (8%), China (7%) and United Kingdom (7%). It is noted that exports to the United States increased substantially, particularly for travel goods owing to the Generalized System of Preferences (GSP) scheme. Meanwhile, imports of goods recorded an increase of 18.6% in 2019 – compared to 21.3% growth in 2018 – as imports of vehicles, petroleum and construction materials recorded robust growth while imports of garment materials marginally increased. Cambodia largely imported goods from regional countries, of which China accounted for 43%, followed by Thailand (16%), Vietnam (14%), Japan (5%) and Korea (3%). Figure 1 presents the item-by-item trade balance on goods.

Figure 1. Exports, Imports and Trade Balance
in percent of GDP, Q1 2015 – Q4 2019



Source: General Department of Customs and Excise and National Bank of Cambodia staff calculation

- Tourism

Tourism sector experienced a moderate growth in the number of visitor arrivals, mainly due to slower increase of Chinese tourists. In 2019, tourists visiting Cambodia increased 6.6%, compared to 10.7% growth in 2018, reaching 6.6 million, of whom 2.5 million were from China.¹ As shown in Figure 2, the growth rate of foreign tourists was robust during the first half of 2019, but started downward trend in the second half, especially in the fourth quarter after the announcement of a ban on online gambling operations in August. Over the course of 2019, the share of tourist arrivals for business and professional purpose almost doubled from the previous year while that of holiday and leisure purpose slightly decrease; however, in the second half of 2019 the share of business and professional purpose tended to decline in line with descending trend of Chinese tourists. It is noted that, in spite of markedly decelerated growth from 62.1% in 2018 to 15.8% in 2019, the Chinese tourists still accounted for more than one third (Figure 3), indicating that tourism sector is highly dependent on tourists from China.

¹ Including Hong Kong SAR, Macao SAR and Taiwan POC

Figure 2. Number of Tourists (growth) and Purpose of Visits
in percent, Dec 2014 – Dec 2019

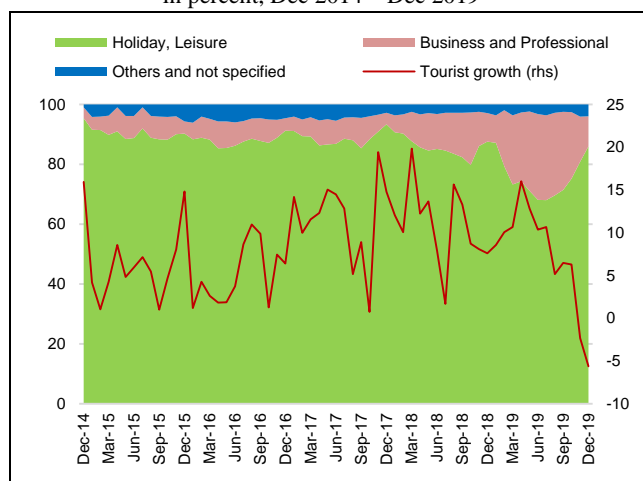
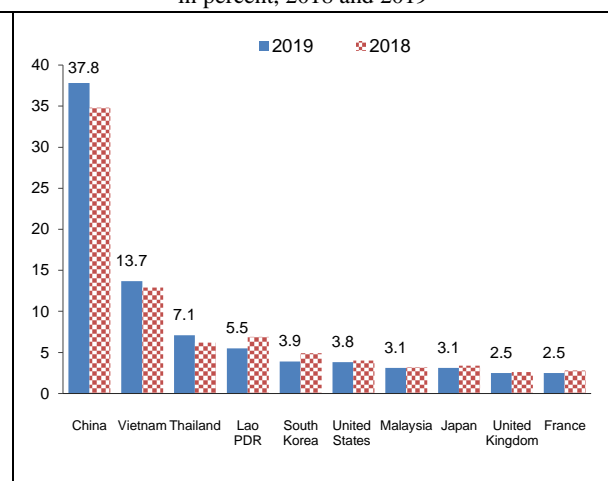


Figure 3. Share of Tourist Arrivals by Nationality
in percent, 2018 and 2019



Source: Ministry of Tourism and Migration Department of Ministry of Interior

- Remittances

Remittances continued to expand gradually reaching USD 1.5 billion in 2019. The growth rate, however, decelerated from 10.8% in 2018 to 6.5%, due to declining inflows from Korea and slower receipts from Thailand (Figure 4). On the other hand, remittance inflows from Japan jumped markedly over the course of 2019 with an increase of 68.6%. As seen in Figure 5, Thailand and Korea remained the two largest sources of remittances, accounting for 68.5% and 19.1% respectively, followed by Japan (5.2%) and Malaysia (2.4%).

Figure 4. Remittances by Country
in million USD, Q1 2013 – Q4 2019

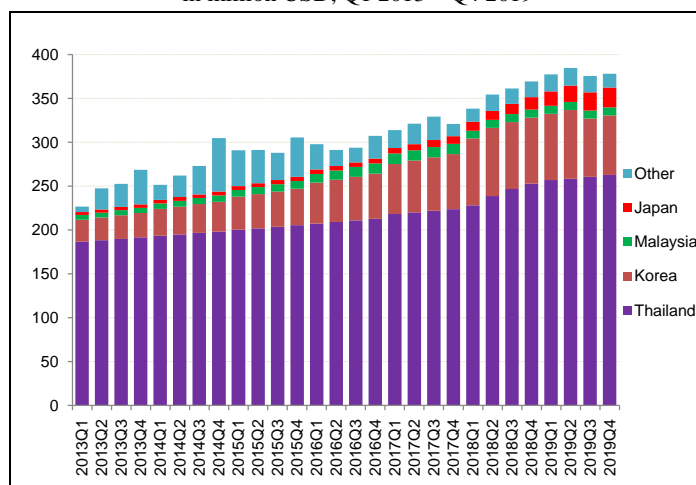
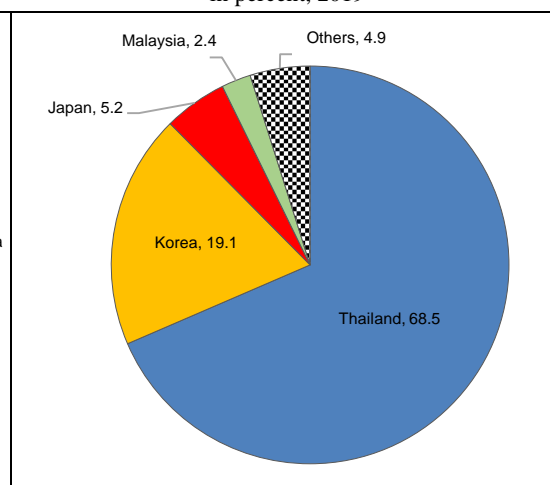


Figure 5. Share of Remittances inflows by Countries
in percent, 2019



Source: National Bank of Cambodia

- Financial Account

Foreign direct investment (FDI) flows remained robust, which was sufficient to finance current account deficit. Total FDI inflows, mainly to financial, construction and real estate, and manufacturing sectors, recorded at USD 3.7 billion in 2019, an increase of 15.2%. Financial sector accounted for about one third of total FDI with 15.8% growth in 2019 – a pick-up from 11.1% growth in 2018. Meanwhile, FDI inflows to construction and real estate sector, with 18.6% share of total FDI, increased by 13.7% last year, and to manufacturing, with 17.1% share, recorded 50.1% growth, which indicated the attraction of these sectors to foreign investors (see Figure 6).

China has been the leading source of FDI inflows to Cambodia. In 2019, FDI inflows from China accounted for 47% share of total FDI, followed by Singapore (7.1%), Korea (6.7%), Vietnam (5%), Japan (4.8%), United Kingdom (4.6%) and Malaysia (4.3%) (see Figure 7).

Figure 6. FDI Inflows by Sector
in million USD, Q1 2013 – Q4 2019

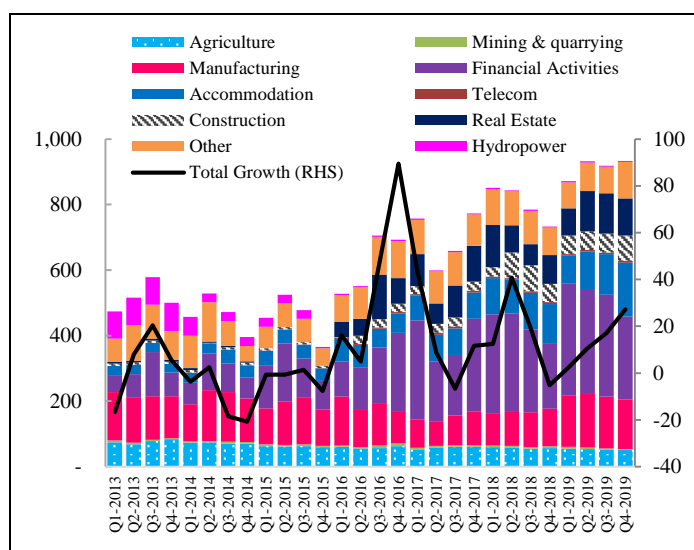
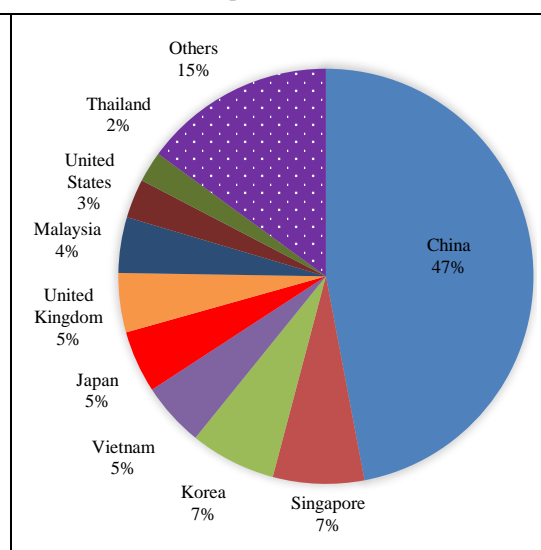


Figure 7. FDI Inflows by Source Country
in percent, 2019



Source: Council for the Development of Cambodia and National Bank of Cambodia

Gross external debt² accelerated due to robust growth of debt of deposit taking corporations. By the end of 2019, total external debt increased 15.8% reaching USD 15 billion (56.3% of GDP) from USD 13 billion (54.7% of GDP) in previous year due to strong upsurge in debt of deposit taking of 28.1%. Debt of deposit taking in term of GDP accelerated from 4% in 2010 to 25% in 2018 and hit 28.1% in 2019, over-taking public debt (27.9%) (Figure 8). Government external debt as share of GDP has improved, down from 29% in 2018 to 27.9% in 2019. China remained the largest creditor to the government with a share of 74% of total bilateral debt and 48% of total government's gross external debt (Figure 9).

Figure 8. Composition of Gross External Debt
in percent of GDP, 2010 - 2019

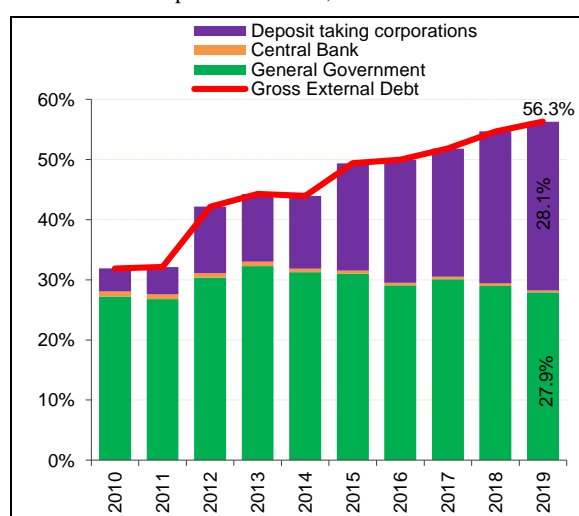
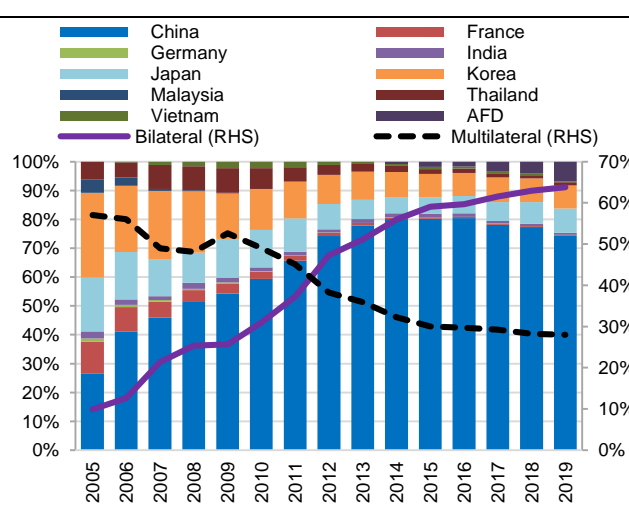


Figure 9. Composition of Government's External Debt in
percent, 2005 - 2019



Source: Ministry of Economy and Finance and National Bank of Cambodia

² External debt includes external borrowings by the government, central bank and deposit-taking companies only.

c) Exchange Rate Movement and External Stability

Cambodia's exchange rate remained stable, without facing any substantial pressure. In 2019, exchange market pressure³ stayed well within the normal range (Figure 10), while the bilateral exchange rate of KHR vis-à-vis USD remained stable. Comparing with 2018, nominal effective exchange rate (NEER) and real effective exchange rate (REER) slightly appreciated, partly due to the appreciation of Khmer Riel against Chinese Yuan. The REER and NEER however tended to depreciate in the second half of 2019 in line with appreciation trend of Chinese Yuan (Figure 11).

Figure 10. Exchange Market Pressure

Dec 2012 – Dec 2019

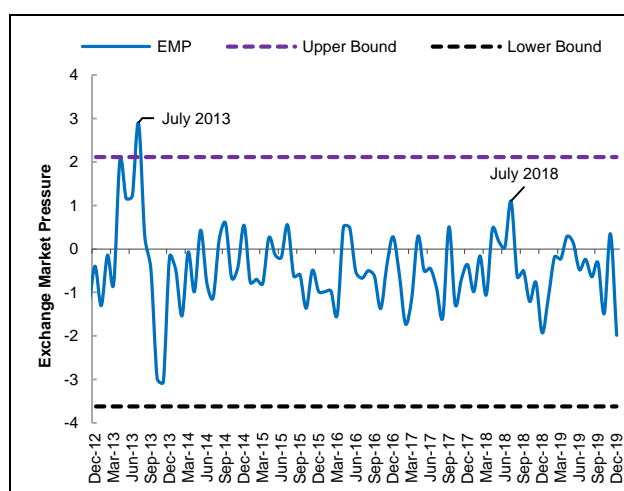
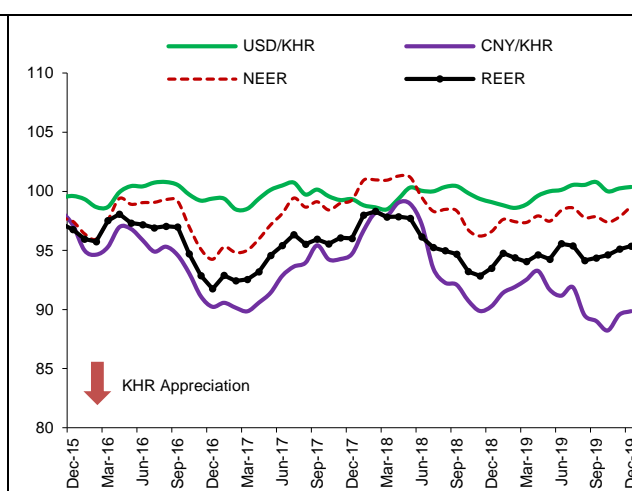


Figure 11. Bilateral and effective exchange rates

2015 = 100, Dec 2015 – Dec 2019



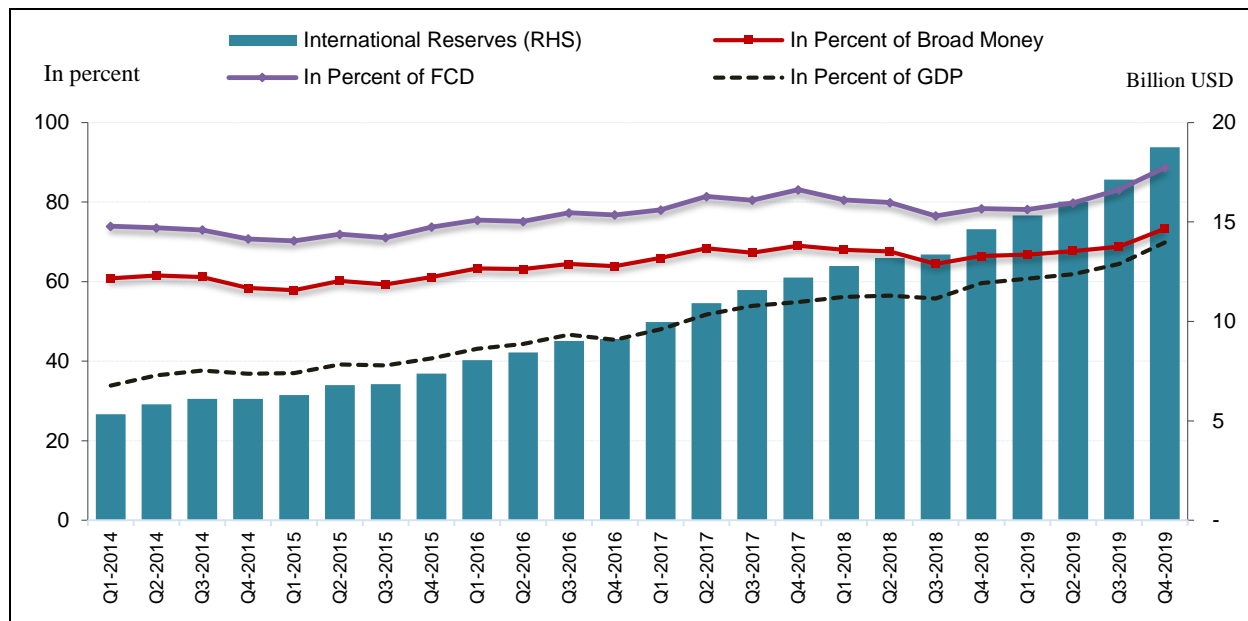
Source: National Bank of Cambodia staff calculation

An accumulation of international reserves has been sufficient, represented strength and as source of buffer. Gross foreign reserves reached USD 18.8 billion in 2019 (Figure 12), which covers more than 8 months of prospective imports of goods and services, higher than minimum benchmark of 3 months for a developing country. The ratio of gross foreign reserves to broad money was 73.3%, which was well above the standard benchmark of 20%. In addition to this, the ratio of gross foreign reserve to GDP was 69.8% and reserve to foreign currency deposit was 88.7%. In the context of high dollarization and managed exchange rate regime, however, the country needs to accumulate more reserves as buffers for maintaining macroeconomic and financial stability.

³ Detail methodology is explained in Appendix 1.

Figure 12. Reserve Adequacy Indicators

in percent, Q1 2014 – Q4 2019



Source: National Bank of Cambodia

1.2 Domestic Conditions and Stability

a) Growth and Inflation

Cambodian GDP grew at 7.1% in 2019, largely contributed by the growth of construction and real estate sector despite slower growth of manufacturing and tourism sectors. The growth slightly moderated compared to that of 7.5% in 2018 (Figure 13). The manufacturing sector increased at a slower phase in 2019, reflected by moderate growth of exports, particularly garment and footwear products while imported garment materials descended markedly. However, investors' confidence on this sector remained strong as FDI inflows to manufacturing sector increased rapidly while the number of factories increased steadily. Regarding tourism related sectors, hotel and restaurant recorded a slow growth in 2019, in line with decelerated growth of tourist arrivals, but transportation activities picked up favorably. Meanwhile, the construction sector continued to perform well with a rapid increase in the number of construction projects (45.5%), imports of construction materials (45.6%) and FDI flows to this sector (13.7%). At the same time, bank loans to construction and real estate activities, which accounted for 17.8% of total bank loans, expanded by 37.2% in 2019. On the contrary, output of agriculture sector declined 0.5% in 2019, partly due to effects of extreme weather condition. It is noted that the share of agriculture sector gradually decreased from about 28% of GDP in 2009 to only 16.7% in 2019 (Figure 14).

Figure 13. Real GDP Growth Contribution
in percent, 2009 – 2019e

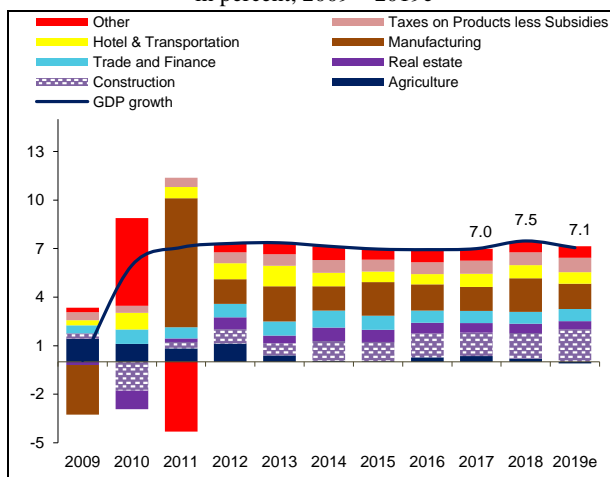
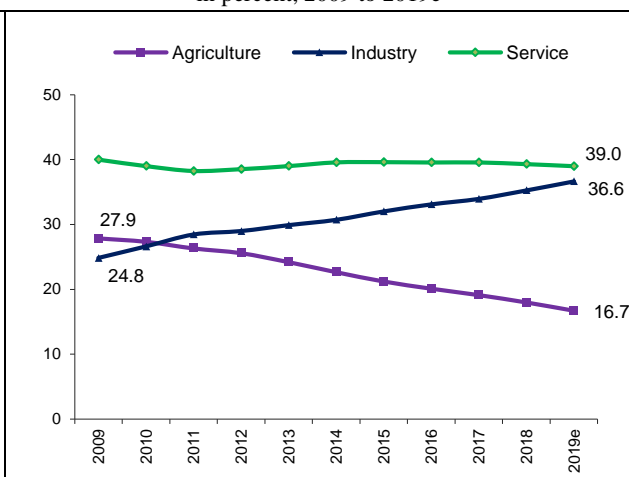


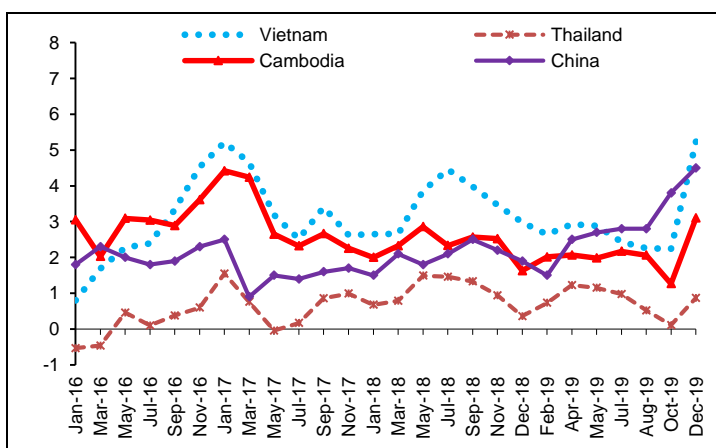
Figure 14. Share of GDP by Sector
in percent, 2009 to 2019e



Source: National Institute of Statistics and National Bank of Cambodia's staff calculation

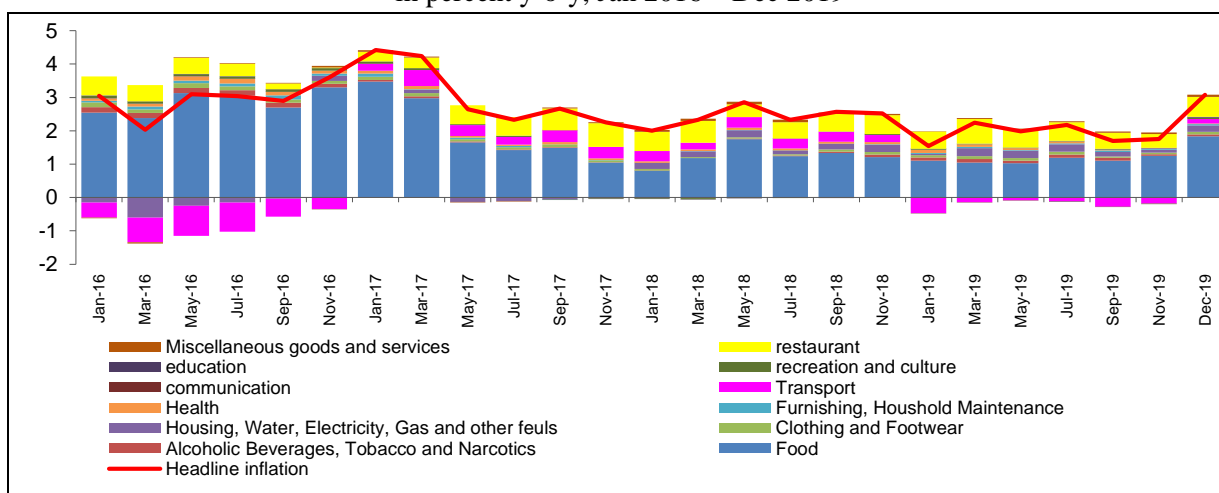
Stable core inflation and a decline in the prices of oil-related items contributed to the low inflation rate in 2019. The inflation rate recorded low in 2019 at 1.9% on average, compared to 2.5% in 2018. In December, however, inflation picked up to 3.1%, mainly due to rebound in prices of fish, vegetable and gasoline. As shown in Figure 15, headline inflation in Cambodia's major import partners also increased at year end. Inflation relatively remained stable in Thailand while it rose to 4.5% in December 2019 in China, driven by a surged of pork price owing to a prolonged African swine fever epidemic, and 5.2% in Vietnam, mainly due to an accelerated price of housing and construction materials. It is noted that the global oil price was USD 64 per barrel in 2019, generally lower than that of last year (USD 71 per barrel), that contributed to the decline of transportation prices (Figure 16).

Figure 15. Headline inflation (in% y-o-y)



Source: National Institute of Statistics and Trading Economics

Figure 16. Contribution to Headline Inflation
in percent y-o-y, Jan 2016 – Dec 2019



Source: National Institute of Statistics

b) Monetary Sector

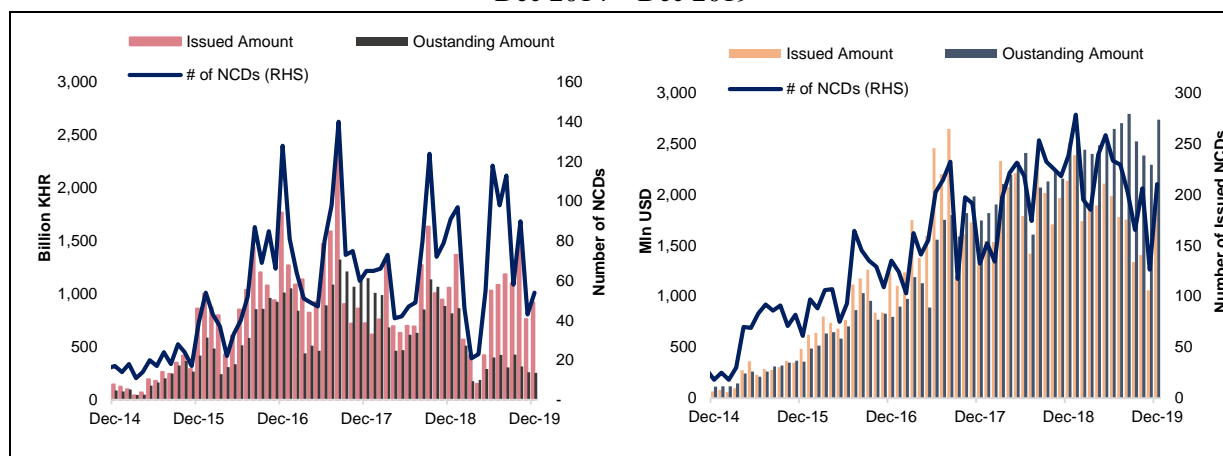
The price and exchange rate were stable over the last two decades, partly thanks to the prudential monetary policy implemented by the National Bank of Cambodia (NBC). The main monetary policy instruments used to achieve this stability are the conduct of foreign exchange intervention and setting reserve requirement rate.

The NBC adopts a managed floating exchange rate regime. This allows the exchange rate to be determined by the market, but the NBC has intervened in the foreign exchange market to stabilize the exchange rate in accordance with the determined objective. Besides, reserve requirement is another instrument used by the NBC to control the speed of credit growth that may affect the inflation rate, yet this tool was not used regularly. The reserve requirement rates for foreign currency and local currency are set differently to promote the use of local currency: 12.5% for USD and 8% for KHR.⁴

Moreover, the NBC has applied additional monetary policy instruments to better manage the liquidity in the banking system. In 2013, the Negotiable Certificate of Deposits (NCDs) in USD and KHR were issued to promote the interbank lending on a secure basis. In 2016, the NBC also developed the Liquidity-Providing Collateralized Operation (LPCO) to supply more KHR liquidity in the banking system, aiming at promoting the use of national currency. Since their issuances, amounts of issued NCD and LPCO have gradually increased (Figure 17 and 18).

Figure 17. Amount and Numbers of NCD in KHR (left) and in USD (right)

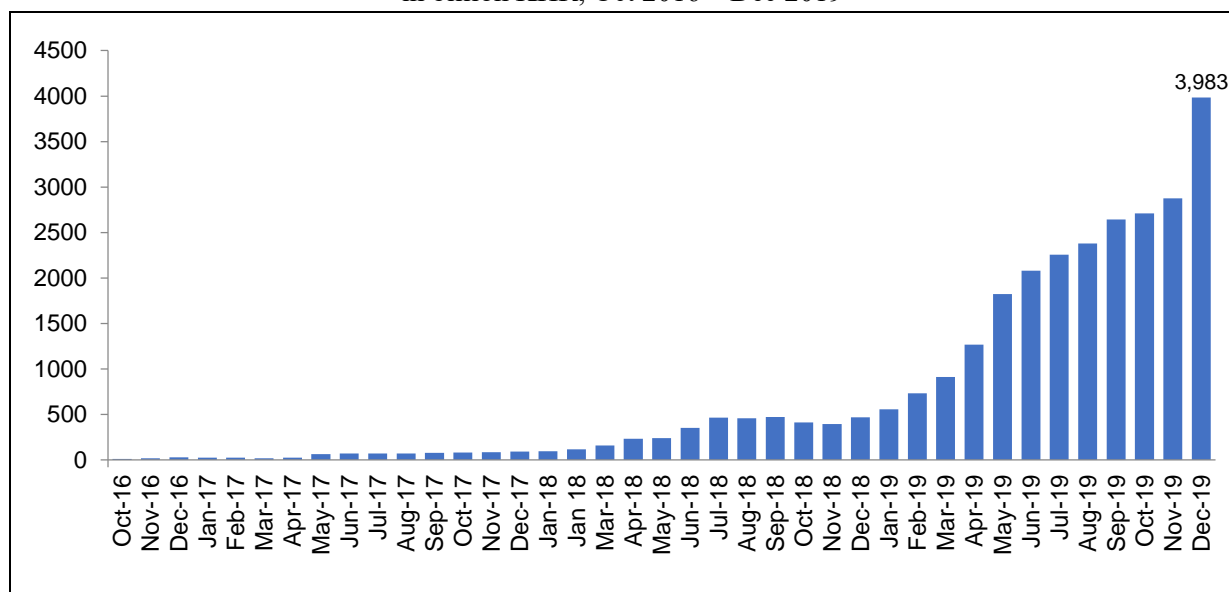
Dec 2014 – Dec 2019



Source: National Bank of Cambodia

⁴ The NBC has temporarily reduced the reserve requirement rates to 7 percent from 8 percent of RRR in KHR and 12.5 percent of RRR in USD, effective from April 2020, in response to the shock of Covid-19.

Figure 18. Outstanding Amounts of LPCO
in billion KHR, Oct 2016 – Dec 2019



Source: National Bank of Cambodia

Nevertheless, the NBC cannot implement the monetary policy to directly affect the economic activities given the high level of dollarization. This has limited the ability of the central bank to set its policy rate because the market rate is tied to the U.S. Federal Funds rate, and to act as lender of last resort during the economic shock.

To overcome these challenges, the NBC has put efforts to promote the use of local currency. The NBC required all financial institutions to have at least 10% of loan portfolio in KHR by the end of 2019; and encouraged the public to use local currency by developing payment system that provides more convenient transactions in KHR, building monetary museum and organizing several campaigns to promote the public awareness.

However, those strategies would not be enough without the participation from all stakeholders. For instance, if the private sector gradually increases the payroll to their employees in KHR, firms display the prices of their goods and services in KHR only, and all payments to public institutions such as school tuition fees, entrance fees at tourist resorts, medical treatment and passport service fees, are paid in KHR, this would strongly promote the national currency.

c) Fiscal Sector

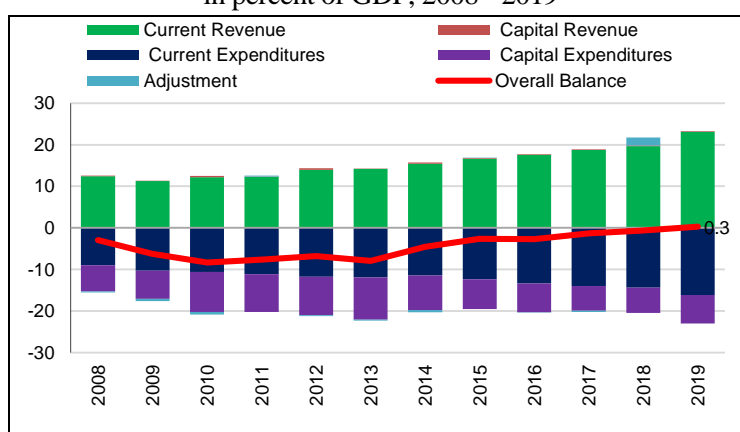
Continued and strong revenue collection led to the first ever surplus in fiscal balance. In 2019, the overall budget balance registered a marginal surplus of 0.3% of GDP, compared to 0.6% deficit in 2018 (Figure 19).⁵ Revenue collection increased 29.1%, reaching 23.3% of GDP in 2019, compared to 19.8% in 2018. The effort and effective implementation of tax collection under Revenue Mobilization Strategy 2014-2018 (RMS) is the main contributor to this increase. For instance, VAT and excise tax (54.3% of the total revenue), direct tax (19.8%) and international trade tax on import (11.4%) increased 30.4%, 29.7% and 22.9%, respectively.

⁵ The data was updated up to March 2020 and subject to be revised as expenditure data was generally lagged up to 6 months or more

The robust growth of total expenditure resulted from the growth in non-wage and capital expenditure. The total expenditure accounted for 23% of GDP, grew by 23.6% in 2019. Current spending, 70.1% of total expenditure, upped by 23.8%, mainly driven by non-wage expenditures of 47.5% and wage spending of 3.9% compared to 2018. It is noteworthy that in the last 5 years (2014-2018), wage expenditure rose by more than 20% (nearly 1% of GDP per year).

Meanwhile, capital spending grew by 23.2%, primarily due to continued increase in foreign financing of 33.9%.

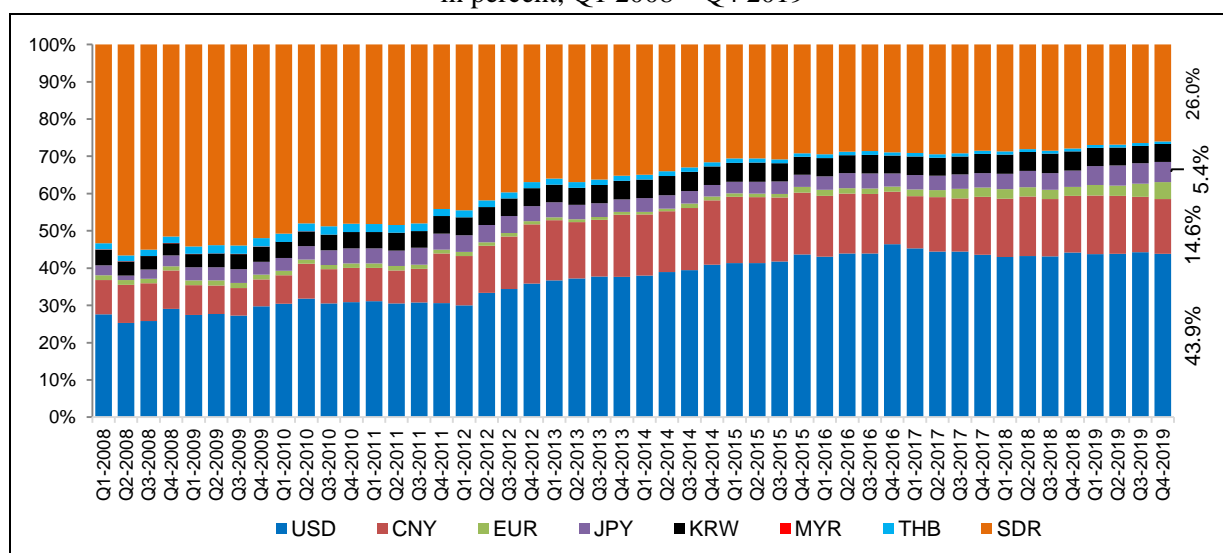
Figure 19. Fiscal Account
in percent of GDP, 2008 - 2019



Source: General Department of National Treasury

The government debt was below the threshold, indicating low risks. By the end of 2019, public debt accounted for USD 7.6 billion (28.5% of GDP), went up by 9.1%. China was the main creditor, accounted for 47.1% of total public debt, followed by multilateral loans, Japan and Korea of 28.7%, 5.4% and 5%, respectively. In terms of currency, three main currencies covered more than 85% of public debt, namely US dollars (43%), SDR (27%) and CNY (16%) (Figure 20). In general, Cambodia's public debt remained sustainable, as government debt-to-GDP ratio hovered around 28.5%, well below the threshold of 40%. Likewise, MEF's debt sustainability analyses also show that the five key debt indicators⁶ were lower than the indicative thresholds.

Figure 20. External Debt by Currency
in percent, Q1 2008 – Q4 2019



Source: General Department of National Treasury

⁶ i/- the present value of public debt to GDP ratio, ii/- the present value of public external debt to GDP, iii/- the present value of public external debt to exports, iv/- debt external debt service to exports, and v/- the public external debt service to revenue

d) Construction and Real Estate Sector

Construction and real estate sector has expanded rapidly over the last several years and become one of the main pillars accelerating growth. Over the last five years, this sector has contributed to about one third to economic growth while the share of bank credit to construction and real estate increased steadily from 19% in 2015 to 29% in 2019, with an average growth rate of 34%. At the same time, shadow banking activities have actively expanded as real estate developers have involved with credit provision or sale on credit to home buyers. Given important role of developers in this sector while data availability is still limited, closer coordination from relevant authorities is needed to ensure sustainable and inclusive growth of construction and real estate sector in Cambodia. The NBC has closely monitored the development in the construction and real estate sector and any potential impacts on the banking sector. With support from the IMF technical assistant, the NBC has been developing a residential property price index (RPPI) – focusing on purchased property information – which is expected to be officially published later this year. Furthermore, the NBC has conducted a survey on loan-to-value (LTV) of residential mortgages to understand current practices among banking and financial institutions.

Approved investments into construction projects increased markedly in 2019, reflected by rapid growth in investment amount, number of projects and total surface area. According to the Ministry of Land Management, Urban Planning and Construction (MLMUPC), the number of projects approved jumped by 45.5% with 4,793 projects receiving the green light in 2019 compared to 3,294 projects in 2018 (Figure 21). As shown in Figure 22, approved investment in construction picked up almost two folds over the course of 2019, from 5.8 billion USD in 2018 to 11.4 billion USD. Similarly, Residential properties, particularly in the form of Borey and condominium, and commercial projects made up the largest share of approved projects, accounted for 83.1% and 7.3% of the total number of projects, respectively. Meanwhile, total surface area soared 84.6% in 2019, reaching 23.2 million square meters. The share of approved residential projects accounted for 46.5% of the total surface area in 2019 and that of commercial projects was 31.5% (Figure 23). It is noted that the share of industry projects has recorded a rapid increase, from 7% share of the total in 2018 to 15.9% in 2019, indicating strong investors' confidence on Cambodian economy.

Imports of construction materials and equipment continued to increase rapidly while domestic supply of cement also expanded markedly. In 2019, Cambodia imported USD 2.3 billion worth of construction materials and equipment – including cement, steel and other equipment, a pick-up of 47.2% from the previous year (as shown in Figure 24). At the same time, domestically produced cement recorded at 7.9 million tons,⁷ allowing the country to reduce the amount of imports to supply for the growing construction sector.

⁷ According to an article of Khmer Times on February 13, 2020.

Figure 21. Number of Approved Projects by Sector
2015 - 2019

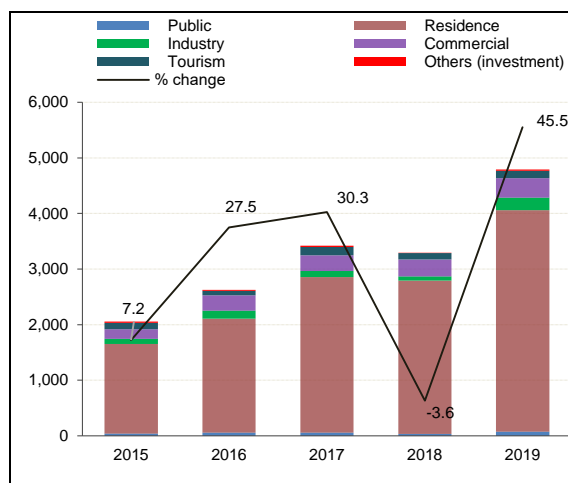
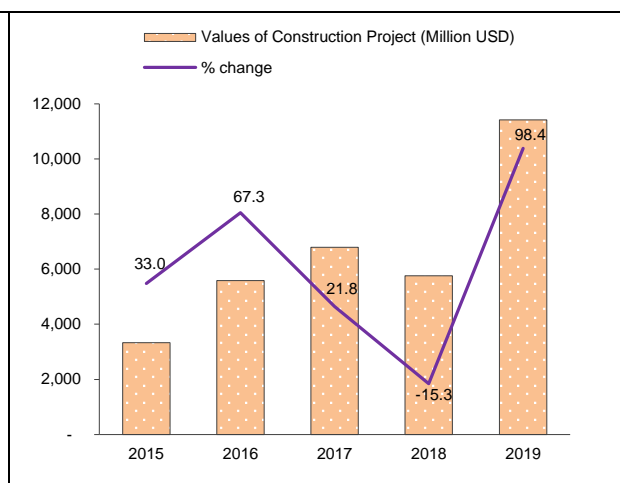
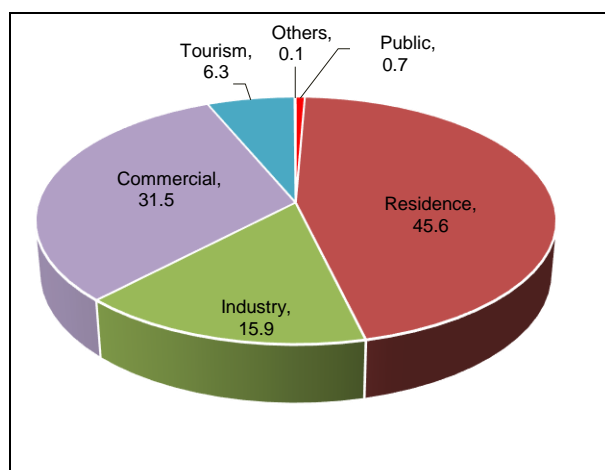


Figure 22. Approved Amount of Construction Projects
in million USD, 2015 - 2019



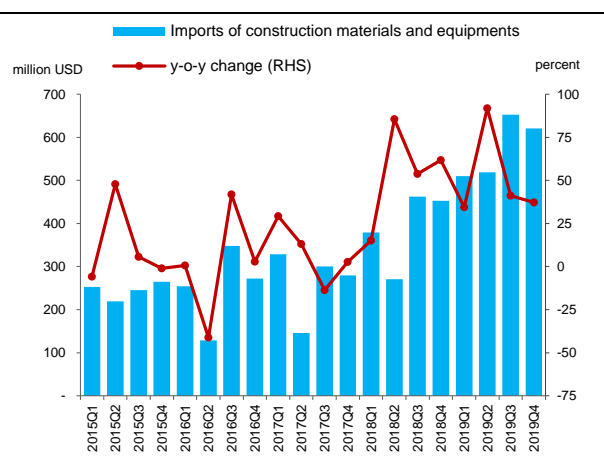
Source: Ministry of Land Management, Urban Planning and Construction

Figure 23. Share of Approved Projects by Sector by Surface Area in 2019 (in percent)



Source: Ministry of Land Management, Urban Planning and Construction

Figure 24. Imports of Construction Materials
in million USD and percent, Q1 2015 – Q4 2019



Source: General Department of Customs and Excise

In line with robust construction activity, some market indicators also posted an increase over the course of 2019. According to CBRE⁸, land price in Phnom Penh's main districts increased by an average of 12%. At the same time, the supply of condominium in Phnom Penh expanded 27%, reaching more than 18,000 units, while prices of mid-range and affordable segment edged up. Knight Frank⁹ also reported that landed housing stock across 131 Boreys in Phnom Penh reached over 51,000 units as at the first half of 2019, picking up 11% from the end of 2018.

⁸ CBRE, Marketview Phnom Penh (Q4 2019).

⁹ Knight Frank, Cambodia Real Estate Highlights (H1 2019).

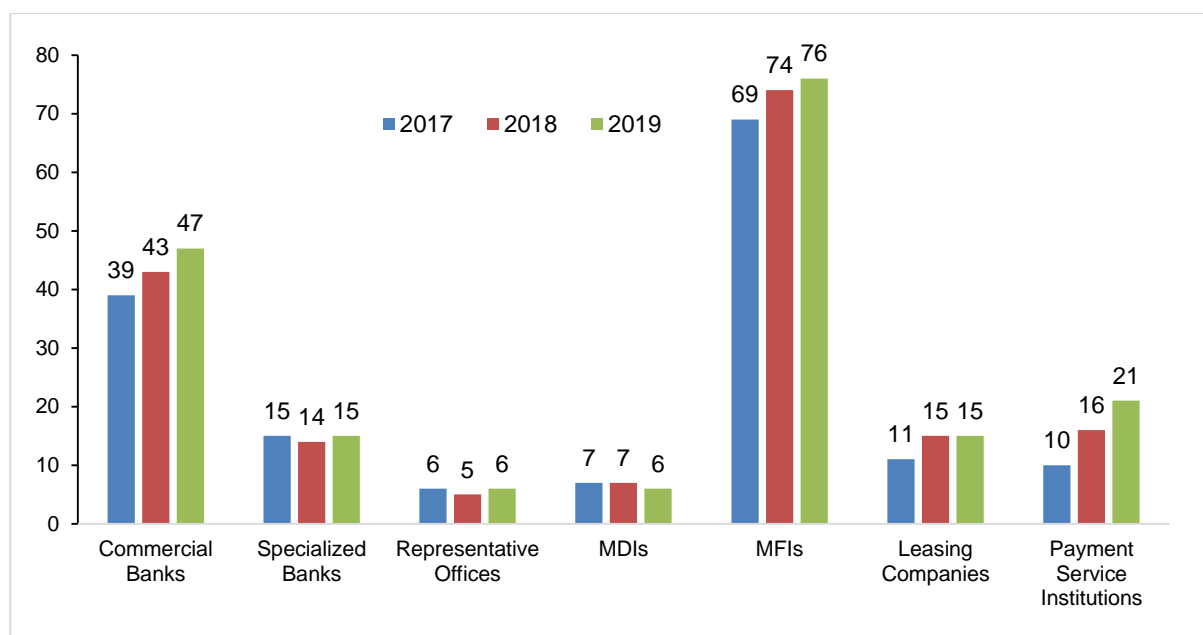
II. FINANCIAL SYSTEM CONDITIONS AND ASSESSMENTS

2.1 Overview of the Banking System's Landscape, Conditions and Assessments

a) Banking System's Landscape

Dominated by commercial banks, Cambodia's banking system continues to maintain its resilience in terms of capital and liquidity.¹⁰ The remarkable growth of the banking sector has been mainly resulted from political and economic stability. These favorable conditions allow the banking system to withstand domestic and international competition challenges, to attract more and more investments into the sector, and to provide more financial services. The confidence and trust in the banking system have allowed these financial institutions to mobilize savings from depositors, as a result, enabling them to increase liquidity.

Figure 25. Cambodia's Banking System in 2019



Source: National Bank of Cambodia

¹⁰ In 2019, there are 47 commercial banks, 15 specialized banks, 82 MFIs (6 MDIs and 76 MFIs), 21 payment service institutions, 15 leasing companies and 245 rural credit institutions.

Figure 26. Share of Assets
in percent, 2013 – 2019

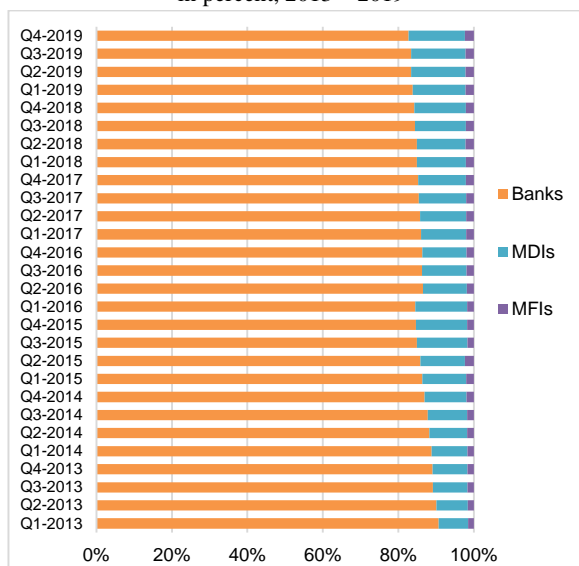
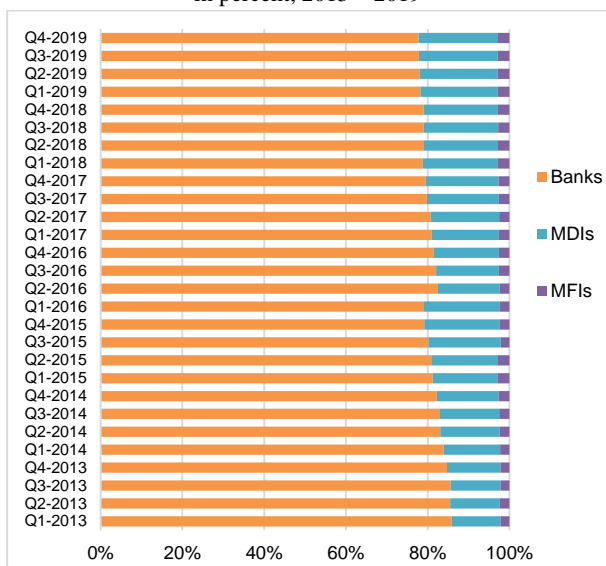


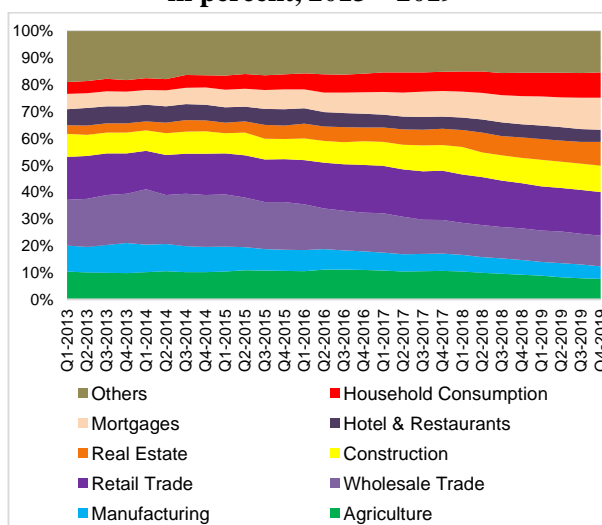
Figure 27. Share of Credits
in percent, 2013 – 2019



Source: National Bank of Cambodia

As one of the contributors to economic growth, commercial banks and specialized banks have provided credits to key economic sectors such as construction, real estate activities, mortgage as well as wholesale and retail trades. The proportion of credits to construction, real estate activities and mortgages have been growing to 9.9%, 8.8% and 11.9% respectively. On the other hand, the share of banks' credit to manufacturing, the key supporter of exports, has declined to 4.6% of total banks' credit; concurrently, credits to wholesale and retail sectors have also dropped moderately to 11.5% and 16.1% respectively. (Figure 28)

Figure 28. Share of Banks' Credits by Sectors
in percent, 2013 – 2019



Source: National Bank of Cambodia

Meanwhile, microfinance deposit taking institutions (MDIs) and microfinance institutions (MFIs) have grown significantly, emphasizing their roles in promoting financial inclusion and rural development. The share of MDIs assets and credit gradually increased to 15% and 19.3% respectively, an increase of about 1% from 2018. MDIs has become more significant in terms of size and services, and in some cases, almost comparable to those of commercial banks. Although the number of MFIs has significantly risen, the sizes and operations remained low. (Figure 26 and 27)

Credits from MDIs and MFIs continue to be dominated by credits to households, while agriculture sector proportion continues to narrow. The household credit accounts for the largest share of microfinance’s total credit, registering 33.3% for MDIs and 39.8% for MFIs. Meanwhile, the share of credits to agriculture has been decreasing in the last three years from 36% in 2016 to 20.8% in 2019 for MDIs and from 16.6% to 10.2% for MFIs. (Figure 29 and 30)

Figure 29. Share of MDIs’ Credits by Sectors
in percent, 2013 – 2019

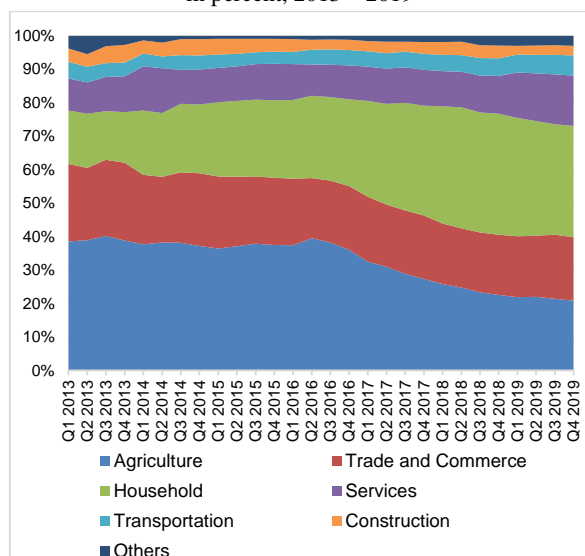
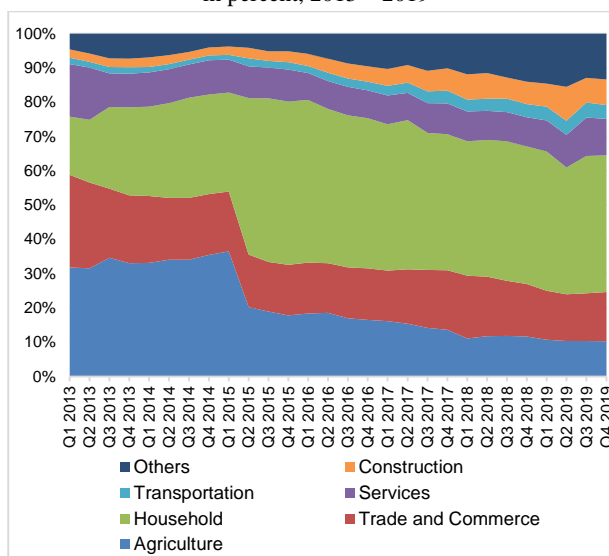


Figure 30. Share of MFIs’ Credits by Sectors
in percent, 2013 – 2019



Source: National Bank of Cambodia

b) Profitability

The profitability of the banking system in 2019 was well-maintained with ROA and ROE of banks at 1.9% and 9.8%, MDIs at 2.9% and 17.7%, and MFIs at 2.2% and 6.3% respectively. Over the past five years, there has been a decreasing trend in profitability, while the efficiency ratio of banks and MFIs remained stable. The declining trend in ROA and ROE could be attributed to competition, the introduction of new regulatory requirements, and partly negative profits from some institutions, most of which are newly established. (Figures 31 and 32)

Figure 31. Banking system's Return on Assets
in percent, 2013 – 2019

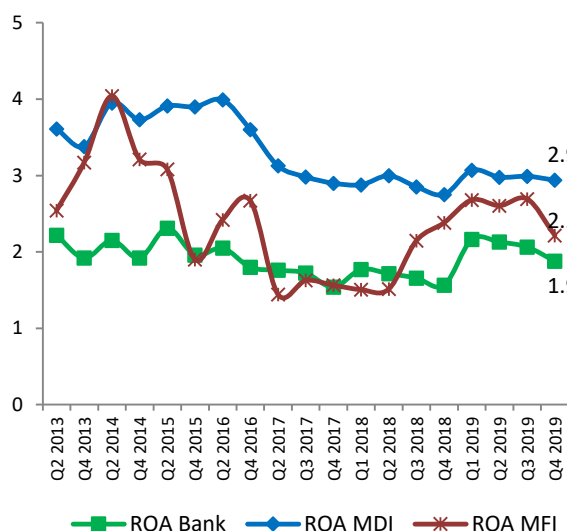
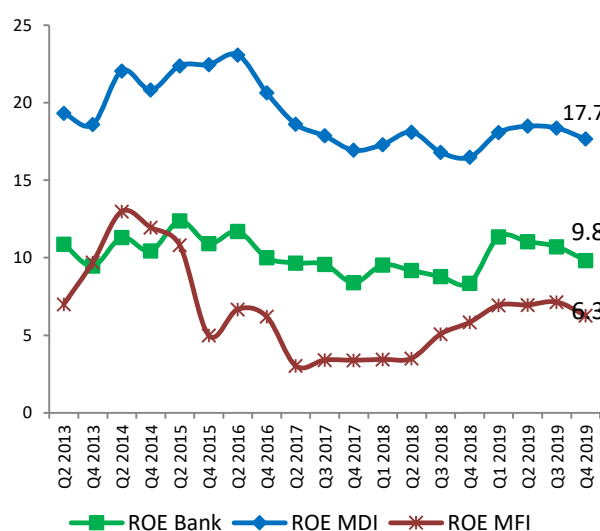


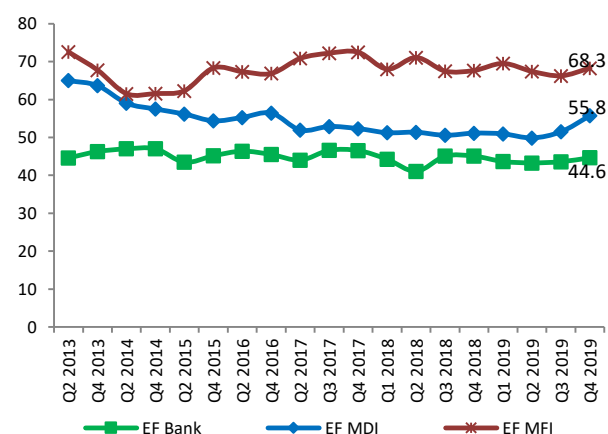
Figure 32. Banking system's Return on Equity
in percent, 2013 – 2019



Source: National Bank of Cambodia

MDIs recorded sustained profitability due to continued efficiency gains. MDIs have generated sustained profits as reflected in stable ROE and ROA. This was partly due to an improvement in internal management costs as evident in a steady decline in efficiency ratio. MDIs' earning performance was largely driven by sustained growth in income from financing activities, accounted for 98% of the total income. Meanwhile, MFIs continued to have lower ROE and ROA and higher efficiency ratio than those of banks and MDIs. This could be due to a different business model given that MFIs relied on borrowings and capital as their funding sources rather than deposits. (Figure 31, 32 and 33)

Figure 33. Efficiency Ratio
in percent, 2013 – 2019



Source: National Bank of Cambodia

Figure 34. MDIs' Profit Structure
in percent, 2013 – 2019

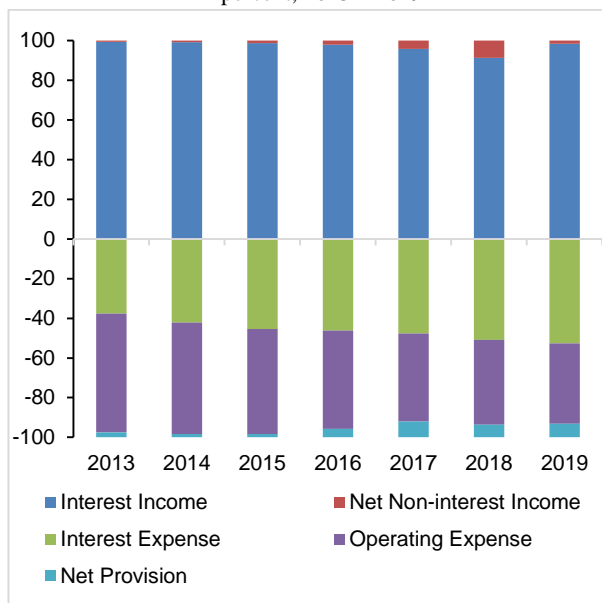
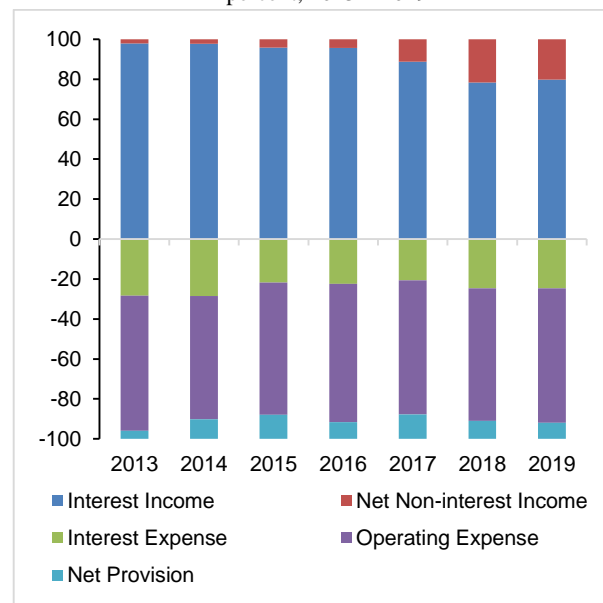


Figure 35. MFIs' Profit Structure
in percent, 2013 – 2019



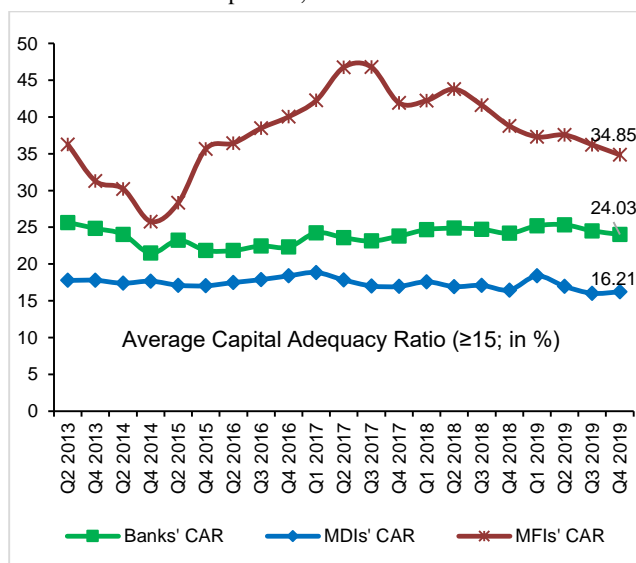
Source: National Bank of Cambodia

c) Capital Position

The overall banking system maintains an average capital adequacy ratio (CAR) higher than the regulatory requirements (15%). Banks have maintained high and stable CAR at around 24%. By the end of 2019, MDIs have the average CAR of 16.2%, slightly above the benchmark. Meanwhile, the average CAR of MFIs has fallen to 34.9% while some MFIs have lower CARs than 15%. (Figure 36)

It should be noted that a cross-sectional comparison of CAR among the 3 types of financial institutions (Banks, MDIs and MFIs) is not advisable due to differences in regulations as well as their business models.

Figure 36. Capital Adequacy Ratio
in percent, 2013 – 2019

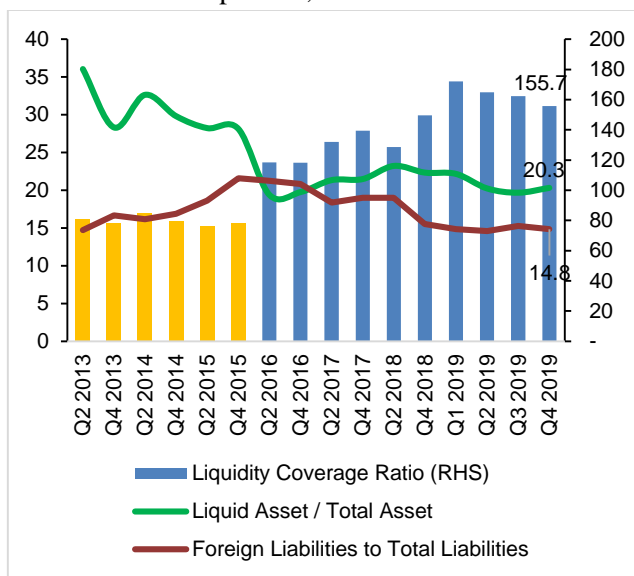


Source: National Bank of Cambodia

d) Liquidity Position and Funding

Commercial Banks have been able to withstand short-term liquidity stress with the current Liquidity Coverage Ratio (LCR) at 155.7% on average, higher than the regulatory benchmark (90%), and its primary funding source is deposit. Over the years, commercial banks have increased their liquidities whereas the proportion of foreign liabilities has shrunk. A closer look reveals that banks' funding has predominantly been deposits. In Figure 37, the yellow bars represent the old calculation of Liquidity Ratio complied with 50% threshold, while 2016 onward, the Liquidity Coverage Ratio (LCR) is calculated in compliance with the new LCR Prakas, and as of 2019, the LCR threshold is 90% and will be raised to 100% in 2020.

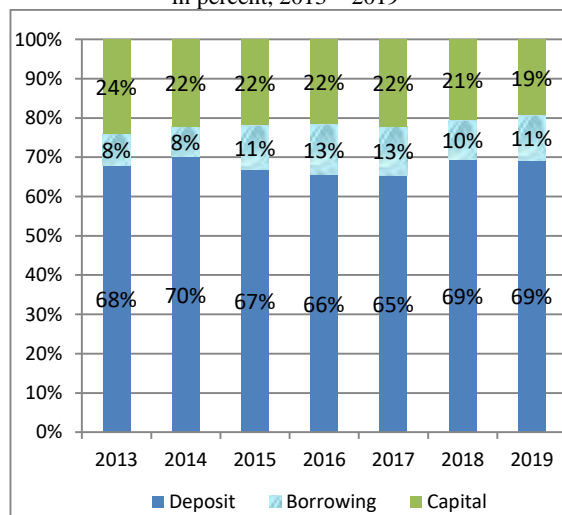
Figure 37. Commercial Banks' Liquidity Position in percent, 2013 – 2019



Source: National Bank of Cambodia

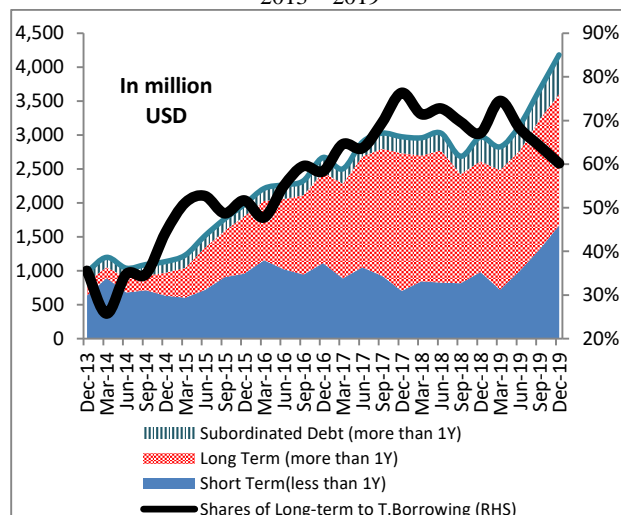
As of December 2019, 69% of banks' funding was in the form of deposits and banks' borrowing constitutes around 11% of total funding, of which around 60% was long-term. (Figures 38 and 39)

Figure 38. Banks' Funding Sources in percent, 2013 – 2019



Source: National Bank of Cambodia

Figure 39. Banks' Borrowing Funds 2013 – 2019



MFI sector relied more on borrowing compared to banks. MFI's funding structure consisted of deposits, borrowings and capital to support its financing activities. Deposits played a key role to support MDIs, accounting for around 46% of total funding in 2019. At the same time, MDIs also acquired funding through borrowings, contributing around 36% of total funding. (Figures 40 and 41)

Figure 40. MDIs' Funding Structure
2013-2019

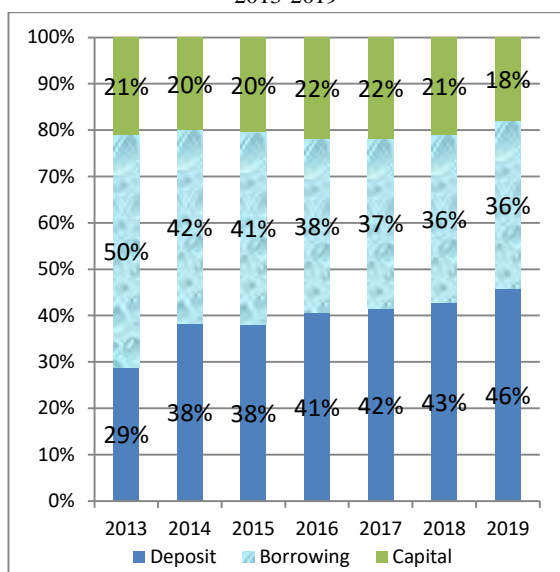
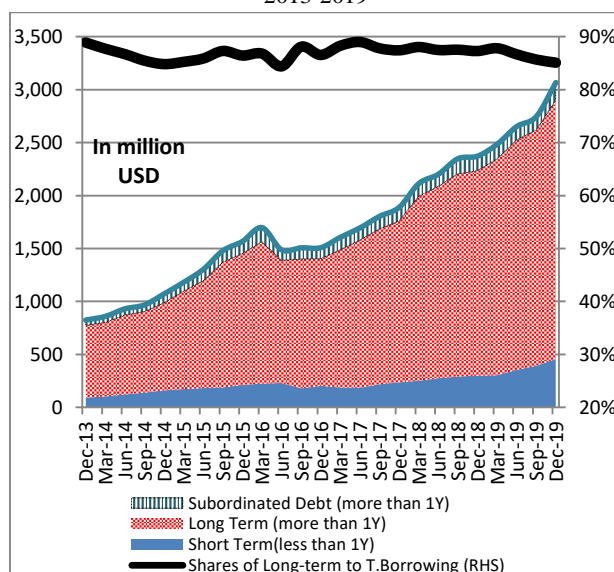


Figure 41. MDIs' Borrowing Funds
2013-2019

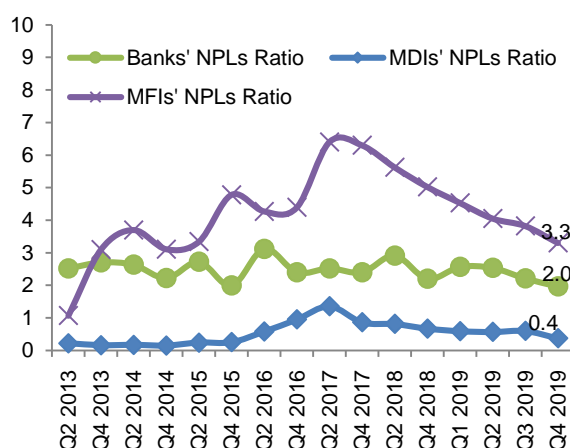


Source: National Bank of Cambodia

e) Credit Quality

The overall credit quality in the banking system remained healthy, reflected by low NPL ratios for both banks and MDIs. The NPL ratios for banks and MDIs were 2% and 0.4% respectively while NPL ratio for MFIs was 3.3%, exhibiting a higher level than that of Banks and MDIs. However, over the last 3 years, the NPLs of MFIs have fallen dramatically.

Figure 42. Non-performing Loan
in percent, 2013 – 2019



Source: National Bank of Cambodia

2.2 Development in Securities and Insurance Sectors

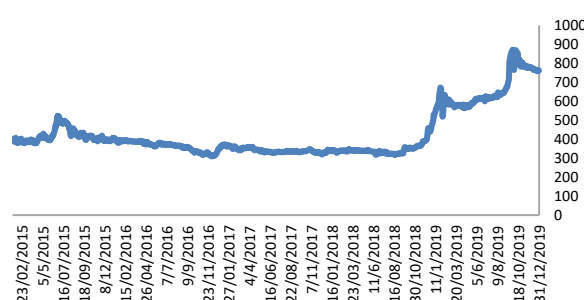
a) Equity Market

In 2019, Cambodia Securities Exchange (CSX) continued to perform remarkably despite the lack of initial public offering. The market capitalization increased by 58.5% in 2019, from KHR 1.77 trillion in 2018 to KHR 2.8 trillion in 2019.

The CSX index significantly increased driven by strong performance of Sihanoukville Autonomous Port (PAS) and Phnom Penh Autonomous Port (PPAP). The index jumped by 58.4%, from 480.98 to 761.73 points (see figure 43). Share of PAS continued to increase in December 2019, contributing 92.1% return for the whole year; meanwhile PPAP's return contributed more than 62.8%, comparing to the same period last year.

Cambodia's equity market has become more active, reflected by the significant increase in the number of daily trades. The CSX reported that average daily trading volume increased dramatically by 302.7%, whereas the average trading value picked up by 487.8% from KHR 106.9 million to KHR 628.2 million.

Figure 43. Performance of CSX Index in 2019
2015 - 2019



Source: Cambodia Securities Exchange

b) Bond Market

More corporate bond issuers have entered the market in the effort to develop Cambodia's bond market and promote the KHR. Advanced Bank of Asia Limited which was listed on 23rd August 2019, offered 1,280,000 bonds in the local currency worth KHR 128 billion but only 848,210 units were issued which is equal to KHR 84.8 billion. The 3-years-bond, rated B by S&P Global Ratings, provides investors with 7.75% coupon to be paid semi-annually. Furthermore, LOLC (Cambodia) Plc. was listed on 10th May 2019 and offered 800,000 corporate bonds in the local currency which is worth KHR 80 billion. The bonds were divided into two types: 264,000 plain bonds with 9% coupon and 536,000 FX-indexed bonds with 8% coupon, all of which are to be paid semi-annually.

In order to enhance the development of the securities market, the government has offered tax incentives for a period of three years to institutions and companies listed in the stock exchange or the bond market by cutting 50% off their income taxes and granting reliefs on tax debts including indemnity from paying full income tax, withholding tax, value added tax (VAT), specific tax on certain merchandise and services, accommodation tax and public lighting tax.

Table 1: Bond Issuers

Issuer	Hattha Kaksekar Limited (HKL)	LOLC (Cambodia) Plc.	ABA Bank
Issuing Date	November 14, 2018	April 26, 2019	August 14, 2019
Bond Type	Coupon Bond	- Coupon Bond - FX-indexed bond	Coupon Bond
Value of bonds issued	KHR 120 billion (USD 30 million)	KHR 80 billion (USD 20 million)	KHR 84.8 billion (USD 21.2 million)
Currency	KHR	KHR	KHR
Maturity Date	3 years	3 years	3 years
Coupon Rate	8.50%	- 9% - 8%	7.75%
Number of bonds issued	1,200,000	800,000	848,210
Nominal Amount	KHR 100,000 per unit	KHR 100,000 per unit	KHR 100,000 per unit
Underwriter	SBI Royal Securities Plc.	Yuanta Securities (Cambodia)	SBI Royal Securities

c) Insurance Sector

The insurance sector continued to grow, reflected by the total gross premium of general insurance and life insurance. By the end of 2019, there were 13 general insurance companies, 11 life insurance companies and 7 micro-insurance firms operating in Cambodia. The total gross premium increased by 31.4% in 2019 up to USD 245.8 million. The sales of general insurance grew by 18.8% mainly driven by auto, medical and property insurance. Furthermore, life insurance premium increased by 42.4% due to strong sales of endowment policy.

Furthermore, the amount of total gross claim paid for general and life insurance expanded in 2019. General insurers paid out around USD 29.1 million in claims in 2019, compared to USD 19.8 million in 2018. Therefore, the claim ratio increased up to 28.3% in 2019 (from 22.8% in 2018). Moreover, claim in the life insurance increased by 108% up to USD 4.8 million in 2019 (with the claim ratio 3.4%) from USD 2.3 million in 2018 (with claim ratio of 2.3%).

The proportion of insurance sector is still small in the financial system, but have seen a rapid growth over the last few years. Based on the IMF's calculation, the insurance sector contributed around 0.5% of total financial sector assets.

Figure 44: Gross Premium
in million USD, 2016 - 2019

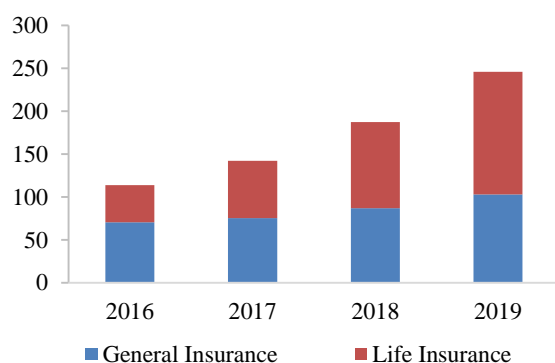
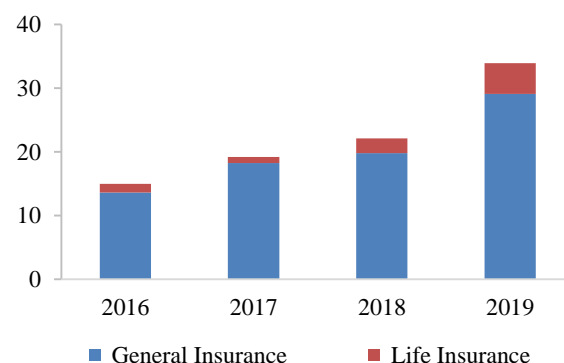


Figure 45: Gross Claim Paid
in million USD, 2016 - 2019



Source: Insurance Association of Cambodia

III. MACRO-FINANCIAL LINKAGES AND POTENTIAL RISKS TO FINANCIAL STABILITY

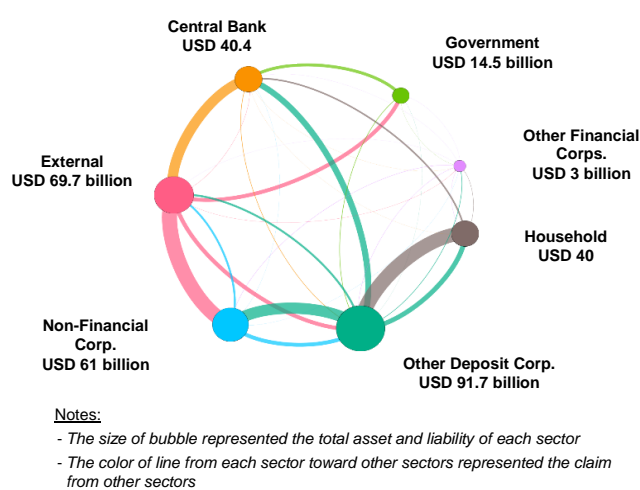
In 2019, Cambodia's macroeconomic condition and banking sector remained resilient. Nevertheless, some economic and financial indicators showed a sign of slowdown in the last few quarters, which deserve more assessments on macro-financial linkages and potential risks to financial stability. Meanwhile, the establishment of the National Financial Stability Committee is an encouraging development to have a formal platform for data sharing and policy coordination between the NBC, Ministry of Economy and Finance (MEF) and the Securities and Exchange Commission of Cambodia (SECC).

3.1 Balance Sheet Analysis

As of 2019, results from the balance sheet analysis (BSA)¹¹ showed that three major economic agents, namely other deposit corporations (ODCs), non-financial corporations (NFCs), and external sector had strong financial interconnectedness (figure 46). The ODCs showed a net claim of USD 2 billion, accounted for 7.6% of GDP to the rest of the sectors, indicating prominent role of the sector in uplifting and supporting economic growth of Cambodia. A relatively large source of funds of the sector was from the household, external sector and NFCs of USD 27.4 billion, USD 7.6 billion, and USD 7.4 billion, respectively, all of which accounted for 95% of total inflow into the sector. On the other hand, in terms of claim from other sectors, ODCs accumulated USD 46.9 billion, shared 174% of GDP or 29.3% of total claim from the rest of the sectors, and were mostly used in providing loans to non-financial sector, which absorbed 47% of the total asset. The outflow to household, which was the main source of fund of the sector, shared a relatively small of 19%, likewise the outflow to the rest of the world shared 8% (USD 3.8 billion). Inflow from external sector absorbs around USD 7.6 billion typically in loan and deposit.

External sector indicated a net claim of USD 17 billion from the rest of the sectors mainly due to higher liability of NFCs and government. By 2019, the flow of fund from external sector to NFCs stood at USD 27.7 billion, whereas the influx of this sector to external one was relatively small, accounting for USD 3.6 billion. In terms of the interconnectedness between government and external sector, there was no government's claim to this sector given the unavailability of government bond while the inflow of fund to government sector was USD 7.5 billion from abroad, which was mostly in the form of grants and concessional loans.

Figure 46. Total Financial Position of All Sectors in 2019

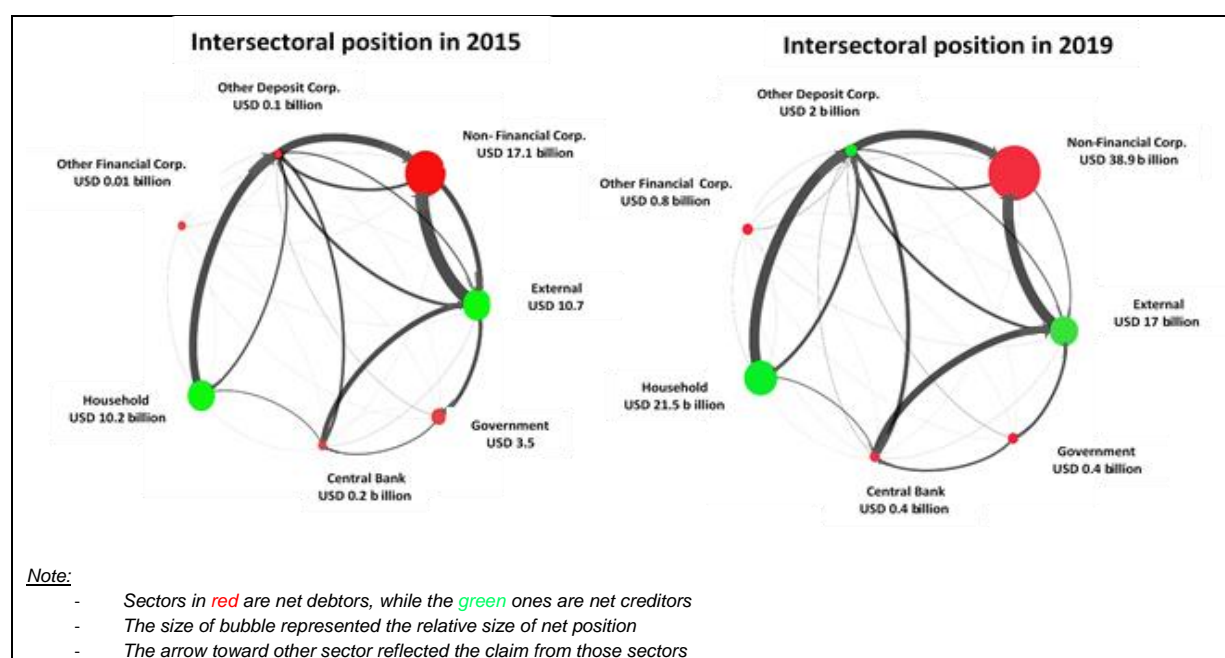


Source: National Bank of Cambodia's staff calculation

¹¹ Balance sheet approach is a systematic analytical framework for exploring how balance-sheet weaknesses contribute to the origin and propagation of crises, by focusing on stock variables in a country's sectoral balance sheets and its aggregate balance sheet. It covers 7 sectors including government, central bank, other deposit corporations (ODCs), other financial corporations (OFCs), household, and external sector.

Looking at inter-sectoral position across time between 2015 and 2019 (figure 47), within these years, Cambodia had followed the same economic patterns, but the values and sizes of each sectors had rapidly expanded. During the period, ODCs played more active role in collecting resources typically from household and providing the majority of fund to the NFCs. The inflow from other sectors into ODCs had increased robustly from USD 22.4 billion in 2015 to USD 48.8 billion by 2019, while the outflow also jumped from USD 22.6 billion to USD 46.9 billion. Apart from that, the net claim of external sector to other sectors also showed a rapid upswing, reflecting the increase in inflow from USD 27.9 billion in 2015 to USD 43.4 billion by 2019, while the outflow rose from USD 17.2 billion to USD 26.2 billion. The huge inflow of fund from the rest of the world mostly went to NFCs leading to the rise of net liability of NFCs from USD 10.1 billion in 2015 to 17 billion by 2019, most of which were in the form of FDI in Cambodia.

Figure 47. Intersectoral Position



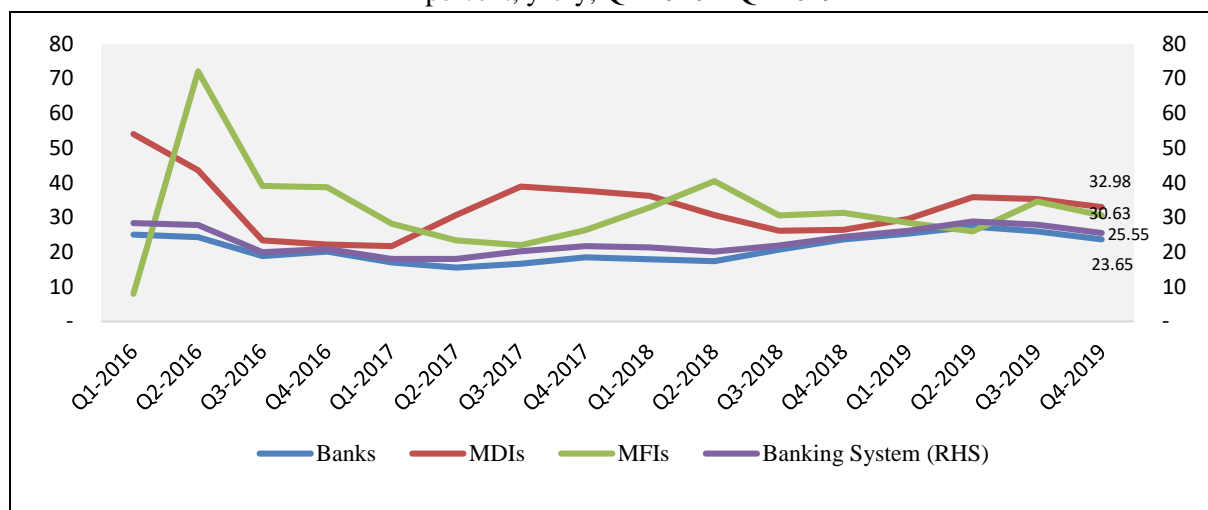
Source: National Bank of Cambodia's staff calculation

3.2 Credit growth

a) Overall Credit Growth and Credit to GDP Gap

Financial conditions have been accommodative, but the overall credit growth in the banking system remained high. By the end of 2019, credit growth in the banking system recorded at 25.5% picking up from 24.5% in 2018. Credit growth in MDIs and MFIs remains high while the growth in banks moderated.

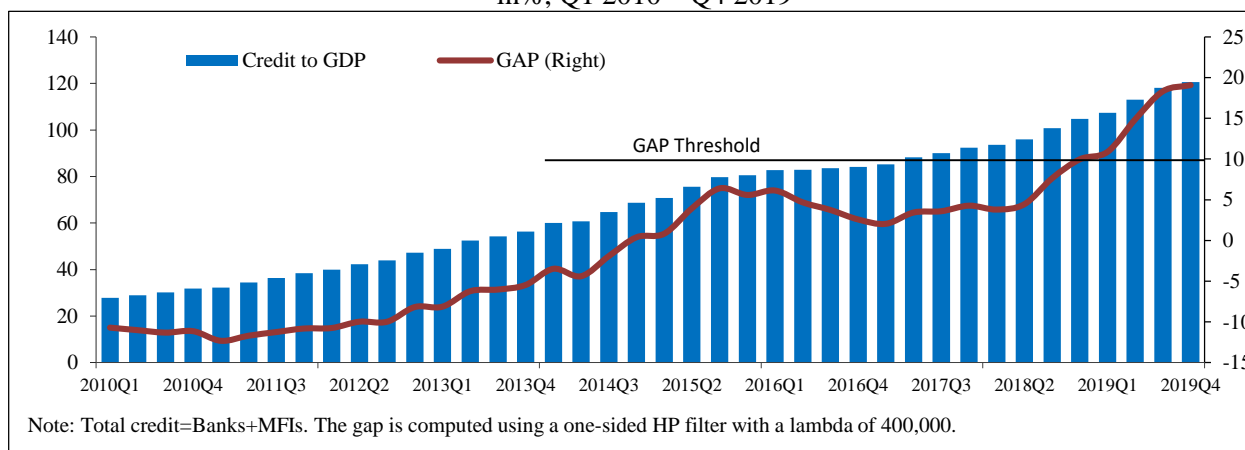
Figure 48. Banking System Credit Growth
in percent, y-o-y, Q1 2016 – Q4 2019



Source: National Bank of Cambodia

A high credit growth led to a widening of credit-to-GDP gap, at 19%, above the BIS threshold of 10%. Based on the Basel Committee on Banking Supervision, this high credit-to-GDP gap may signal the build-up of excessive credit, and the Countercyclical Capital Buffer (CCyB) should be thus activated and equals 2.5% of Risk-Weighted Assets.¹² However, given that Cambodia is a fast-growing country and the financial market is still at an early stage of development, it could be normal for the country to strongly rely on the banking sector to finance its economic activities, which leads to a high credit level.

Figure 49. Credit to GDP and Gap
in%, Q1 2010 – Q4 2019



Note: Total credit=Banks+MFIs. The gap is computed using a one-sided HP filter with a lambda of 400,000.

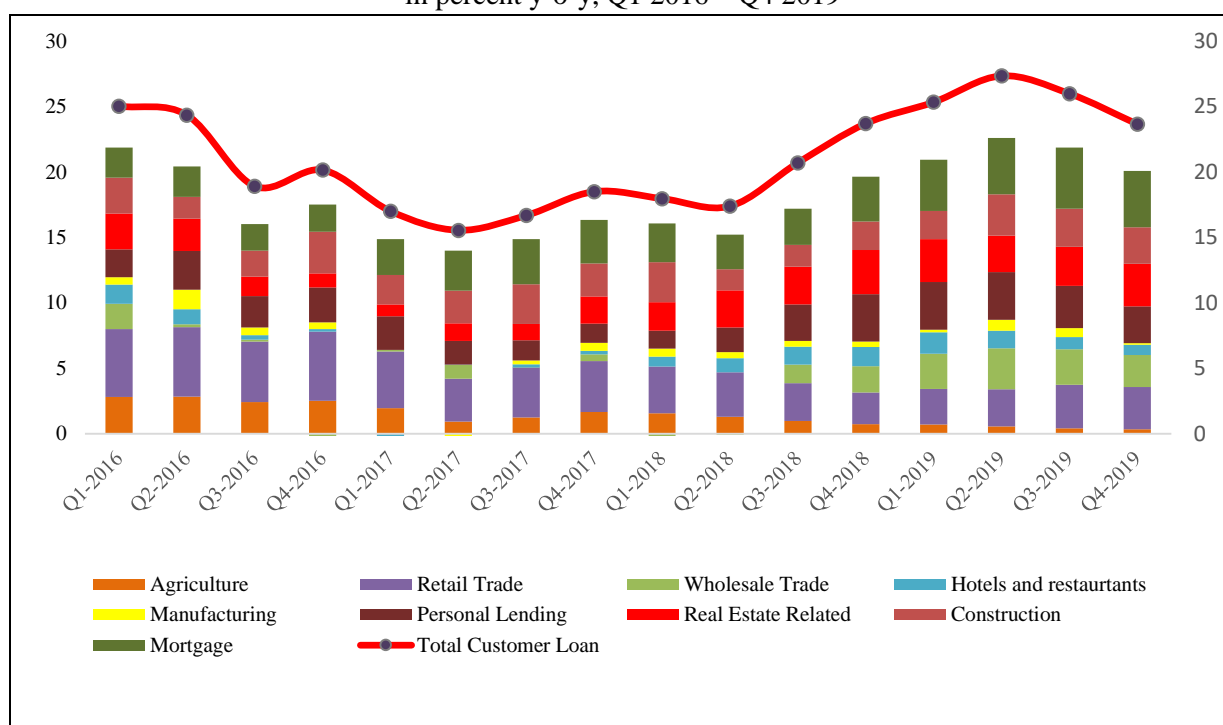
Source: National Bank of Cambodia

b) Sectoral Credit Growth

Bank credit channeled to various sectors in the economy and channeled rapidly to construction, real estate and related sectors. Total bank loans increased moderately to 23.7% by the end of 2019, maintaining the same growth from 2018. Credit growth contribution was dominated by mortgage (4.4%), trade (retail and wholesale: 5.8%), real estate activities (3.2%), household consumption (3%), and construction (3%). However, the contribution of agriculture to credit growth remained low (0.4%) while manufacturing registered a negative contribution.

¹² Geršl, A and J Seidler. (2012). Excessive credit growth and countercyclical capital buffers in Basel III: An empirical evidence from central and east European countries. Economic Studies and Analyses, no 6(2).

Figure 50. Contribution of Sectoral Credit to Total Bank Credit Growth
in percent y-o-y, Q1 2016 – Q4 2019



Source: National Bank of Cambodia

On the back of favorable developments in economic activity in 2019, credit extended by banks recorded strong growth for trade and commerce. Financing to the wholesale and retail trades accounted for about 27.7% of banks' business loans and registered growth of 22% and 21% respectively. This strong growth was largely contributed by the increase in investment sentiment and continued access to financing for small and medium enterprises (SMEs).

The increasing share of bank credit in mortgage, construction and real-estate related activities could be explained by robust domestic demand and strong FDI inflows from China in recent years. Strong economic growth has led to a gradual increase in real GDP per capita from 828 USD in 2011 to 1,205 USD in 2018¹³ and lift up Cambodia from low-income country to lower-middle income country. This increase in income encouraged people to demand for more mortgage loans. Loan to mortgage continued to record a high growth at 41.3%, trending up from 35.6% in 2018. At the same time, in the last few years, Cambodia has seen a huge influx of Chinese investment in key sectors including construction and real-estate sectors. As a result, credit growth in construction was elevated from 22% in 2018 to 30.5% in 2019, and growth in credit to real estate activities remained high, even though it began to slowdown from 55% in 2018 to 42.4% in 2019 (Figure 52).

¹³ Source: World Bank, <https://data.worldbank.org/indicator/NY.GDP.PCAP.KD?locations=KH>

Figure 51. Share of sectoral credit to total credit in percent, 2017, 2018 and 2019

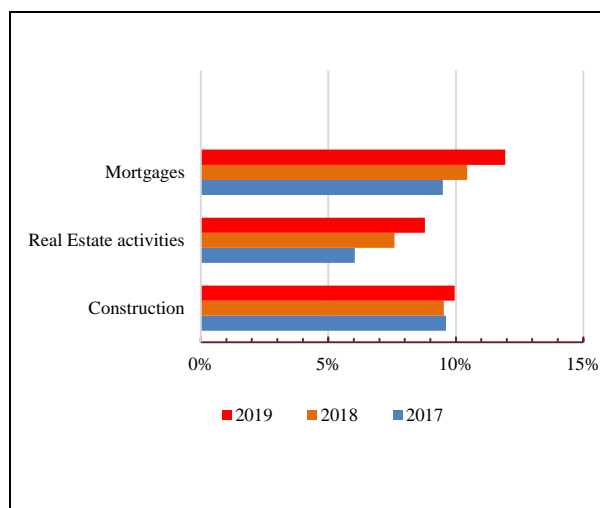
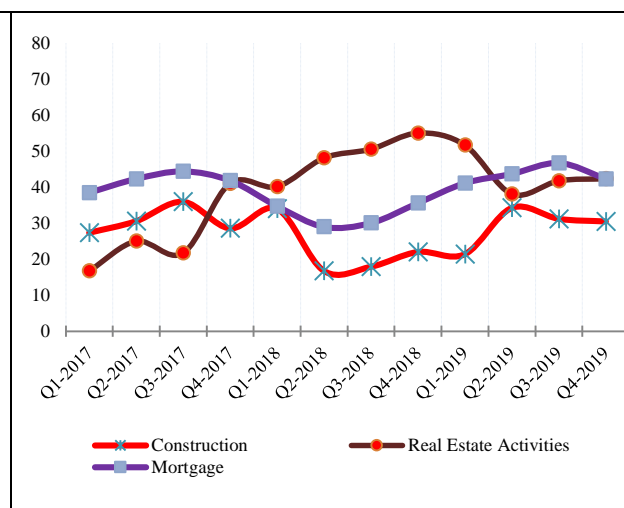


Figure 52. Major sectoral credit growth in percent, Q1 2017 – Q4 2019



Source: National Bank of Cambodia

On the other hand, credit growth to tourism has remarkably slowed down in the last three quarters of 2019, concurrently with the slower increase of tourist arrivals. The credit to hotels and restaurants recorded a strong growth in 2018 (30.9%) but slowed down to only 17.7% in 2019. This could be explained by the decline in growth rate of tourist arrivals that has also slowed down from 10.7% in 2018 to 6.6% in 2019.

Similarly, credit growth to manufacturing sector decelerated and recorded lower growth in 2019. After picking up from a growth rate of 3.5% in Q1 to 14.2% in Q2 (y-o-y), the credit growth to manufacturing sector decelerated with the growth of 3.6% by the end of the year. This may reflect the weak external conditions related to global trade tensions and slower world economic growth.

Meanwhile, credit growth to agriculture has shown a decreasing trend since 2017, due to unfavorable weather condition and a slower sectoral productivity growth. The proportion of loan to agriculture has been gradually contracting to 8% in 2019, from 9% in 2018 and 11% in 2017, and its growth decelerated from 15.2% in 2017 to only 4.5% in 2019. This downward trend could be explained by the slower growth of the sectoral output that decelerated to only 1% during the period 2014-2018, down from 3.7% for the period 2009-2013, which is due to the drop of agriculture commodities' prices and extreme weather events.¹⁴ Even though Cambodia is a country dominated by young population, there is an increase in the number of young people moving to work in urban areas and abroad, which causes the labor shortage and affects labor productivity in the sector.¹⁵ (Figure 51)

¹⁴ Lao, P. (2019). Cambodia's Agriculture Productivity: Challenges and Policy Direction. Research working paper.

¹⁵ RGC (2019). Modernizing agriculture sector: Long-term vision and policy orientation. Technical report.

Figure 53. Share of Sectoral Credit to Total Credit
in percent, 2017, 2018 and 2019

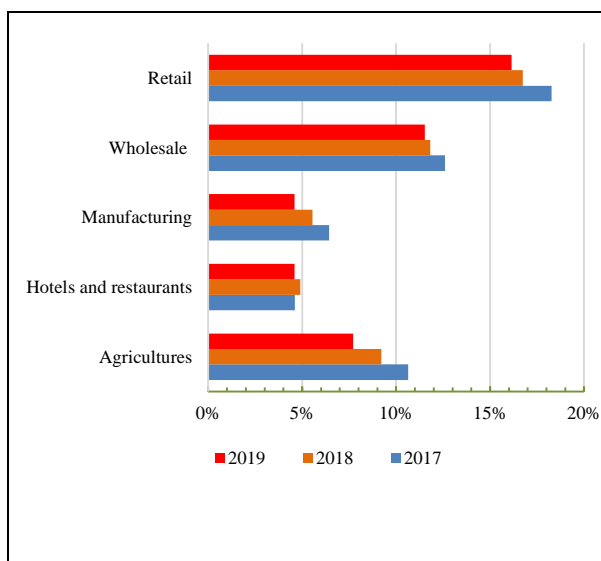
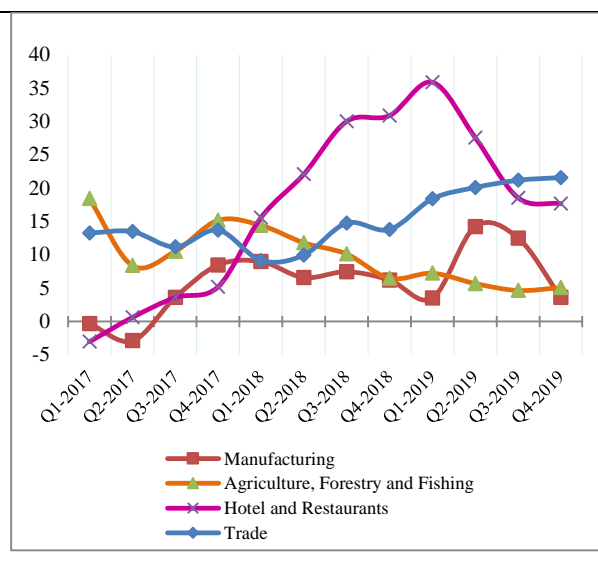


Figure 54. Major Sectoral Credit Growth
in percent, Q1 2017 – Q4 2019



Source: National Bank of Cambodia

Bank's credit to households remained high, even though the growth rate moderated to 38.7% in 2019 from 42% in 2018. Within the household credit, residential mortgage loans remained the primary contributor to household credit growth (23%) while personal consumption and credit cards contributed 15.45% and 0.25% respectively. Notwithstanding, growth in residential mortgage credit accelerated further from 36% in 2018 to 41.3% by the end of 2019, mainly reflecting the increase in housing demand particularly from middle-income households. The increase may also result from competition among banks which lower down the interest rate, making it more affordable to households.

Meanwhile, corporate loans still played an important role in supporting domestic economic activities. Loans to corporate sector recorded a stronger growth of 22.78% at the end of 2019 (20% in 2018), contributed mainly by financing to retail trade (6.27%), real estate activities (5.74%), construction sector (5.18%), and wholesale trade (4%). Contribution from loan to hotels and restaurants (1.54%) and manufacturing weakened comparing to 2018, driven largely from slower growth in China and other advanced countries.

Figure 55. Household's credit growth contribution
in percent, Q1 2016 – Q4 2019

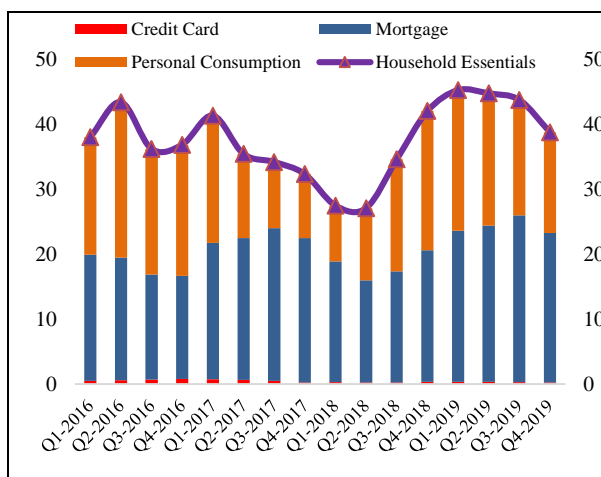
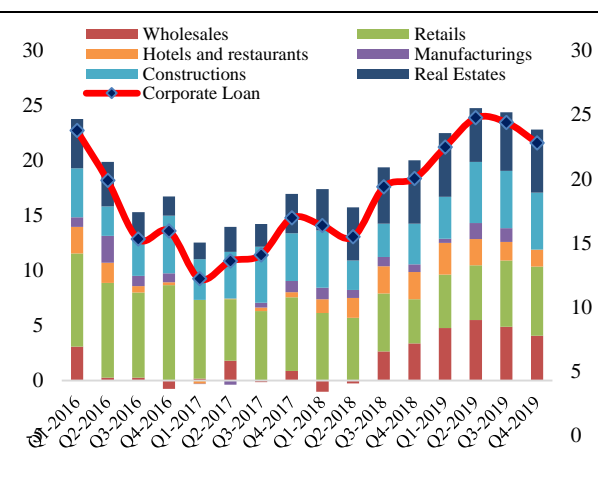


Figure 56. Corporate's credit growth contribution
in percent, Q1 2016 – Q4 2019



Source: National Bank of Cambodia

Microfinance still continues to play an important role in supporting Cambodia's socio-economic development, through increasing formal financial inclusion. MFIs' credit growth increased from 30.69% in 2018 to 32.48% in 2019, and MDIs' credit growth accelerated from 25.8 to 34.8% during the same period. These strong growths of credit in MDIs and MFIs were primarily contributed by loans to households followed by financing to service and trades. The increased access to finance offered by MFIs and MDIs allowed people to avoid reliance on informal lending that charge higher interest rates and shorter loan durations. It should be noted that the share borrowing from informal sources decreased from 32% in 2004 to less than 6% in 2016.¹⁶

A significant credit growth to households in rural areas allowed people to smooth their consumption. In 2019, the MDI and MFI credit to households contribute 8.7% and 12.6% to total MDIs' and MFIs' credit growths, respectively, making the household credit account for the largest share of microfinance's total credit in 2019 (33.3% for MDIs and 39% for MFIs). Some previous studies¹⁷ found that credit from microfinance increased household income and expenditure, which contributed to the poverty reduction in Cambodia.

However, the increasing household leverage may increase risks of over-indebtedness if the growth in household loan size outpaced the household income growth. The most common explanation for this problem centers on the lack of financial literacy among borrowers, leading them to multiple lending.¹⁸ In response to this concern, the National Bank of Cambodia has been strengthening financial literacy through a number of initiatives including: the launch of "Let's Talk Money" campaign in 2015, using videos and comic books to help educate people about financial matters. The NBC has also been working with other relevant agencies such as the Ministry of Education, Youth, and Sport to insert financial education into the general education program, and the Ministry of Women's Affairs to promote financial literacy for women.

Figure 57. MDIs' Sectoral Credit Growth Contribution
in percent, Q1 2016 – Q4 2019

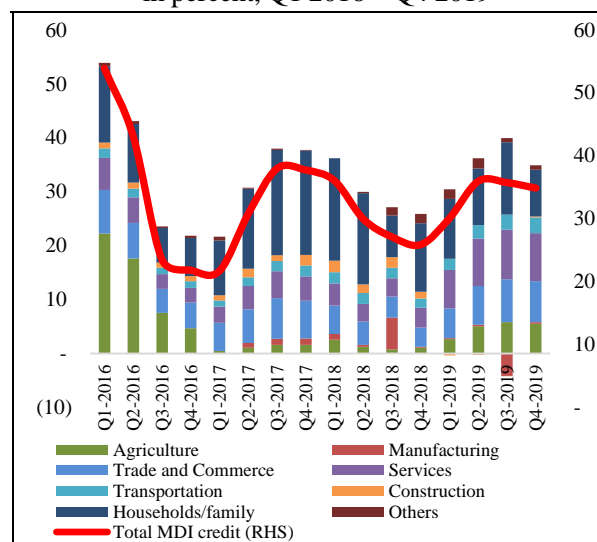
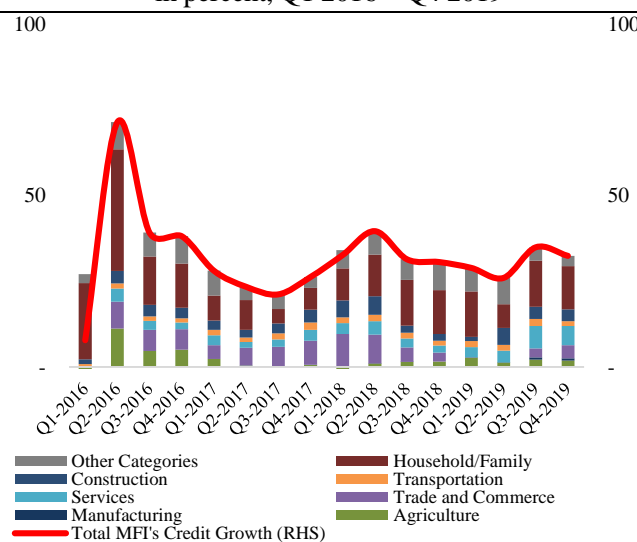


Figure 58. MFIs' Sectoral Credit Growth Contribution
in percent, Q1 2016 – Q4 2019



Source: National Bank of Cambodia

¹⁶ Pimhidzai, O., Tong, K., Anantavasilpa, R., Popovic, A., Mel, S., & Sanchez Martin, M. E. (2019). Microfinance and Household Welfare: Cambodia Policy Note. World Bank's report.

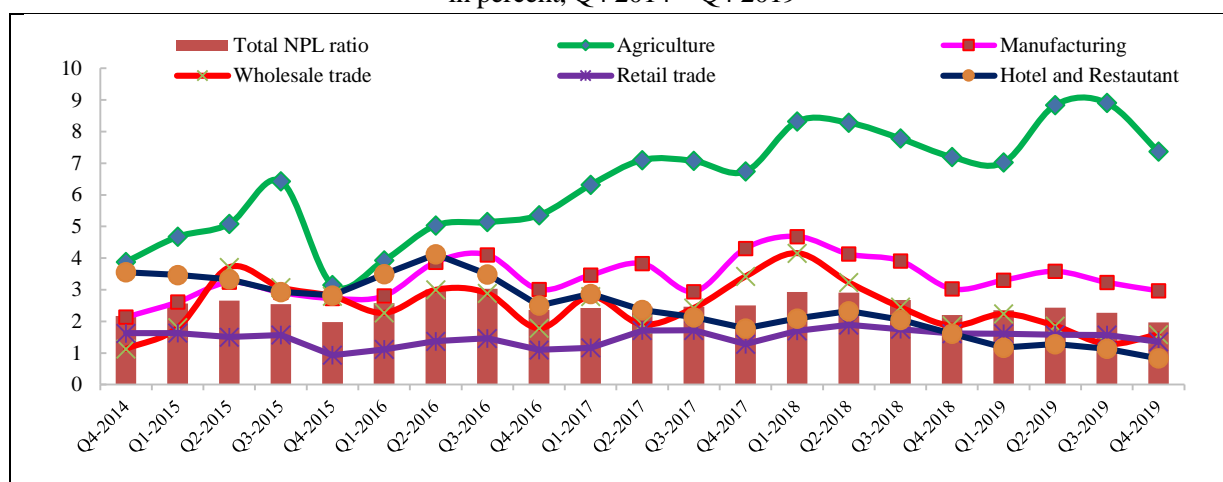
¹⁷ For example: 1- Runsinarith, P. (2014). The impacts of microcredit on poverty reduction: Evidence from Cambodian rural villages. *Philippine Review of Economics*, 51(2), 121-150; 2- Roth, T. M. S., Araar, A., Sry, B., & Phann, D. (2017). The Dynamics of Microcredit Borrowings in Cambodia. Partnership for Economic Policy Working Paper, (2017-17); and 3- Pimhidzai, O., Tong, K., Anantavasilpa, R., Popovic, A., Mel, S., & Sanchez Martin, M. E. (2019). Microfinance and Household Welfare: Cambodia Policy Note. World Bank's report.

¹⁸ Bylander, M., Res, P., Jacoby, L., Bradley, P., & Pérez, A. B. (2019). Over-indebtedness and microcredit in Cambodia: Moving beyond borrower-centric frames. *Development Policy Review*, 37, O140-O160.

c) Quality of Credit by Economic Sector

The overall NPL ratios for banks have decreased but remained high for agriculture and manufacturing sectors. The overall banks' NPL ratios dropped from 2.2% in 2018 to 2% in 2019. Nevertheless, NPL ratios of agriculture and manufacturing sectors remained high, registering 7.4 and 3%, respectively, while other sectors' NPL ratios were sustained below 2%. The banks' NPL ratio in agriculture is not only high but also seems to record an increasing trend since 2014, coincidentally to the slower sectoral productivity growth. A higher NPL ratio may also affect the banks' behaviors to be more reluctant in providing loans to this sector, which should explain a slower growth in banks' credits to this sector in the last few years.

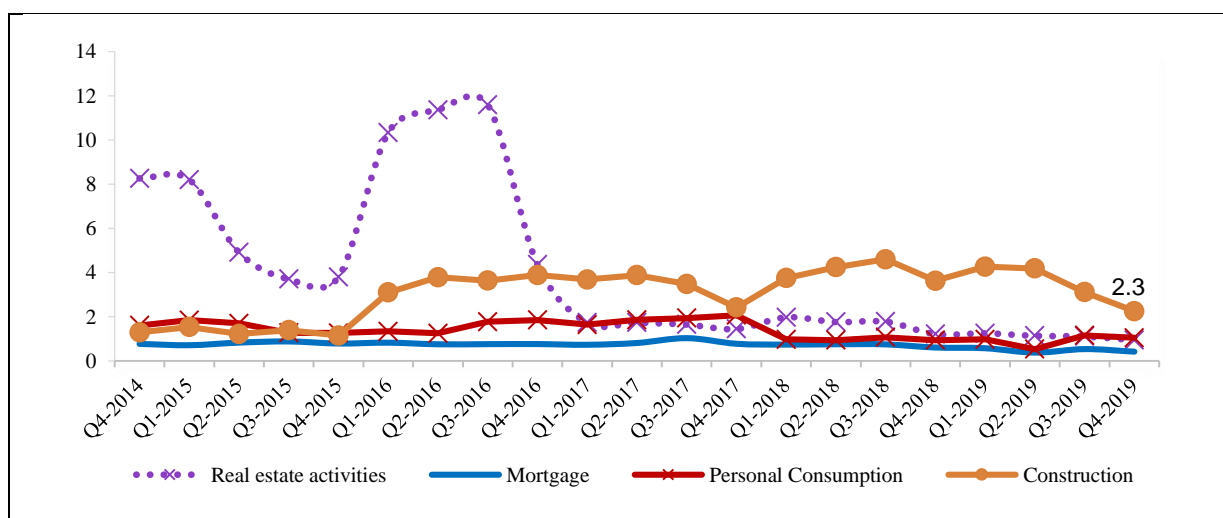
Figure 59. Banks' NPL Ratios on Loans to Major Business Sectors
in percent, Q4 2014 – Q4 2019



Source: National Bank of Cambodia

However, the quality of lending to real estate related and mortgage remained healthy. The NPL ratios of real estate activities and mortgage remained low, at 0.8% and 0.4%, respectively. Furthermore, the NPL ratio in construction sector declined to 2.3% in 2019, comparing to 3.6% in 2018. Though the NPL is slowing down in construction sector, a close monitoring is still required.

Figure 60. Banks' NPL ratios in Real Estate Related and Household Consumption
in percent, Q4 2014 – Q4 2019



Source: National Bank of Cambodia

3.3 Macprudential Measures and Outlooks

In 2019, a number of macroprudential measures was implemented to strengthen the resilience of the banking system:

- Determination of capital buffer, including the capital conservation buffer and countercyclical capital buffer, was introduced to strengthen the capital position of banks and financial institutions, adding on the minimum solvency ratio of 15%. The capital conservation buffer is additional capital that financial institutions must maintain by adding more capital and/or transferring profits during normal financial situations to cope with a situation when they could face losses due to any factors, while the countercyclical capital buffer is additional capital that banks and financial institutions must maintain to bear the loss from systematic risks. The National Bank of Cambodia required banks and financial institutions to hold a capital conservation buffer that equaled 1.25% from January 2019 and 2.5% from January 2020, while the countercyclical buffer is not yet activated and thus equals 0%.
- Increasing liquidity coverage ratio to 90% in June 2019 and 100% in January 2020. The liquidity coverage ratio aims to enable banks and financial institutions to secure short-term debt or obligations by maintaining sufficient liquid assets to ensure all payments, both deposits and other payments.

Box 1: Selected Macprudential Measures issued by NBC

To improve the resilience of the banking system and mitigate risks in the banking sector, the National Bank of Cambodia has imposed several macroprudential measures, such as the enhancement of liquidity and capital position:

Measures	2016	2017	2018	2019	2020
1- Liquidity Coverage Ratio	60% (September)	70% (September)	80% (September)	90% (June)	100% (January)
2- Share of Minimum Registered Capital		50% (March)	100% (March)		
3- Share of Capital Conservation Buffer				50% (January)	100% (January)
4- Countercyclical Capital Buffer Ratio			0% (March)		
5- Prakas on Credit Risk Grading and Impairment Provisioning		(December)			

Note: 1- Minimum liquidity coverage ratio requirement for deposit-taking banks and financial institutions; 2- Minimum Registered Capital Requirement are set at: 300 billion riels (75 million US dollars) for commercial banks, 60 billion riels (15 million US dollars) for specialized banks, 120 billion riels (30 million US dollars) for microfinance deposit-taking institutions, 6 billion riels (1.5 million US dollars) for non-deposit-taking microfinance institutions; 3- Capital Conservation Buffer equals 2.5% of the risk-weighted assets; 4- The Countercyclical Capital Buffer Ratio is in place that may equal between 0 and 2.5% of the risk-weighted assets, but it is not yet activated; 5- The Prakas on Credit Risk Grading and Impairment Provisioning is a part of the implementation of a prudent credit risk management framework imposed on banking and financial institutions under the NBC's supervisory authority.

Meanwhile, the NBC has closely monitored the risks that could be arisen from high credit growths in mortgage and real estate related sectors. For instance, in June 2019, the NBC conducted surveys across all financial institutions to monitor their mortgage portfolio, credit policy, and especially the loan to value (LTV) ratio, which is an indicator for measuring financial leverage. Results show that most of financial institutions have been prudent in providing mortgage loans, as their LTV ratios are generally moderate, below 70%. This survey would provide additional inputs to the NBC for considering future implementation of LTV if needed to all banks and financial institutions to strengthen credit mechanisms and reduce risks of over-indebtedness.

3.4 Macroeconomic and Banking Outlooks

The impact from EBA suspension is smaller than expected but the growing threat is from the impacts of Covid-19 that disrupts economic activities, and thus borrowers' capacity to service loans and banks' earnings will suffer. The growth in tourist arrivals is expected to slowdown remarkably in 2020 due to the Covid-19, which would impact the hotels and restaurants, transportation and communication sub-sectors. The lockdown in the United States and Europe would have effects on Cambodia's exports, particularly manufacturing exports, which could make some factories to temporarily suspend their operations. In addition, having a remarkable growth in recent years, the construction and real-estate related sectors may face an excess supply and the decline in FDI inflows. As a result, credit growth to these sectors are expected to decelerate, while NPL ratio may increase. Meanwhile, people working in informal sector, who are socially less protected, could end up with a sharp decline in income, while the remittances of workers from abroad are also expected to decline. Nevertheless, the growth in agricultural sector is expected to slightly pick up compared to 2019, due to the decreasing impacts of natural disasters and the return of some migrant workers, which will increase labor force in the sector.

The banking system is expected to remain stable, reflecting by: i/-Soundness of banking system's capital and liquidity positions, ii /-High liquidity coverage ratio, iii/-Low NPL ratio, and iv/-Stable profitability. However, due to the widespread of the Covid-19, the banking sector may also face a number of risks such as: i/-Slowdown of credit growth, ii/-Slowdown of deposits, iii/-Increase in restructuring loans, iv/-Tightening external funding sources due to the international financial markets condition, and v/-Decrease in construction and real estate activities.

In response to these challenges, the Royal Government has introduced a series of measures to support economic activities. To support the Royal Government's interventions, the National Bank of Cambodia has also introduced a number of precautionary measures in the banking sector such as: i/-Delayed the implementation for banks and financial institutions to maintain Capital Conversation Buffer at 1.25%, ii/-Reduced the minimum interest rate on Liquidity Providing Collateralized Operation (LPCO) by 0.5% for all maturities; iii/-Decreased the interest rate for Negotiable Certificates of Deposit (NCD) in Khmer riel and U.S. dollar in appropriate level, iv/-Reduced the Reserve Requirement Rate (RRR) from 8% for domestic currency and 12.5% for foreign currencies to 7% for six months to provide additional liquidity to banks and financial institutions, v/-Issued a circular on loan restructuring, and vi/-Reduced the Liquidity Coverage Ratio (LCR) to an appropriate level as necessary. The reduction of reserve requirement rate has increased the liquidity of banks and financial institutions by 1.8 billion USD and the delayed implementation of Capital Conservation Buffer has provided banks and financial institutions to have additional credits by around 3 billion USD. The NBC is also ready to introduce other support measures based on current circumstances.

Appendix: Exchange Market Pressure (EMP) Methodology

Exchange market pressure (EMP) is used to analyze exchange rate pressure in the market by taking into account monthly changes of international reserves (a proxy of central bank's foreign exchange intervention) and nominal exchange rate. The calculation can be divided into two steps: 1) calculation of the EMP and 2) calculation of EMP's threshold.

Step 1: EMP formula

$$EMP_{it} = \left(\frac{e_{it} - e_{it-1}}{e_{it-1}} \right) * 100 - \left(\frac{\sigma_e}{\sigma_{fxr}} \right) \left(\frac{fxr_{it} - fxr_{it-1}}{fxr_{it-1}} \right) * 100$$

Where, e_{it} : exchange rate in time t ; e_{it-1} : exchange rate in the previous period ; σ_e : standard deviation of the change of monthly exchange rate ; σ_{fxr} : standard deviation of the monthly change of international reserves; fxr_{it} : international reserves at time t ; fxr_{it-1} : international reserves in the previous period

Step 2: Defining Threshold

$$\text{Threshold} = \mu_{EMP} + \varphi \sigma_{EMP}$$

Where, μ_{EMP} : average of EMP; σ_{EMP} : standard deviation of EMP; φ : coefficient of σ_{EMP} (lower and upper bound, derived from percentile of EMP)

Note: In the context of a highly dollarized economy, when EMP exceeds the lower bound or upper bound, it does not imply that Cambodia encounters a currency crisis. It indicates foreign exchange market pressure as reflected in a decline in international reserves and/or depreciation pressure (if EMP exceeds the upper bound) or an accumulation of international reserves and/or appreciation pressure (if EMP exceeds the lower bound).

