Cambodia China Trade Relations in Digital Age

Sereyvath Ky*

Introduction

The general idea of bilateral economic relation is to enhance the welfare by increasing the trade in goods and service and flows of production factors. It is well-known from classical trade theory, which is at least based on the work of Ricardo and Heckscher-Ohlin, that the abolition of all kind of trade barriers and all reductions of transaction costs increases the efficiency of all involved trading countries and the overall welfare in all concerned countries. In so far, free trade is in general a first best solution. According to gravity model of trade, China is a big partner of Cambodia in term of population and GDP. China has total population of 1,420 million habitants, where the Chinese language is use the most in the world. China also has experience of economic growth of 7.5% over last ten years. In 2017, China has the total GDP of \$25 trillion (at PPP) which the largest GDP in the world (at current price is \$14 trillion, the second largest).

Trade between Cambodia and China totaled \$4.8 billion in 2016, compared to \$732 million in 2006 and has increased by an average of 26% for the last 10 years. However, Cambodia has a significant trade deficit with China, importing over \$3.9 billion (raw fabrics being the largest constituent) compared to its exports of USD 830 million. It was estimated that 60% of products in Cambodian markets are Chinese-made in 2006, and 24% of Cambodian imports were from China in 2015, respectively. There are multiple large-scale Chinese investment projects in Cambodia such as the 400 MW Lower Se San 2 Dam worth \$781 million and a US\$3.8 billion deep water port project on a 90-km stretch of Cambodian coastline. Between 1994 and 2012, the Cambodian government gave over 4.6 million hectares in concessions to 107 Chinese-owned firms.

The new model of trade is online business and e-commerce which under the framework of 4th generation of industrial development, called mobile business which is in form of B2B, B2C, C2B, C2C. The most modern retailers typically make a variety of strategic level decisions including the type of store, the market to be served, the optimal product assortment, customer service, supporting services and the store's overall market positioning. Once the strategic retail plan is in place, retailers devise the retail mix which includes product, price, place, promotion, personnel and presentation. In the digital age, an increasing number of retailers are seeking to reach broader markets by selling through multiple channels, including both bricks and mortar and online retailing. Digital technologies are also changing the way that consumers pay for goods and services. Retailing support services may also include the provision of credit, delivery services, advisory services, stylist services and a range of other supporting services. This research aims to find out the three obstacles restricting the e-commerce including limitation of software or App using via mobile, limitation of and ability to use new payment technology, lack of confidentiality in e-commerce.

* Sereyvath Ky, PhD CamEd Business School Email: ksereyvath@cam-ed.com To seek for key challenges on e-commerce, a survey has been done in Phnom Penh among students from local people who are living in around Russian Market, Olympic Market, Choam Chao. The total sample size is 300 respondents. The data has been analyzed by using frequency as univariate analysis and crosstabulation as bivariate analysis in quantitative method as a tools to accumulate the key challenges.

Trade Relation and New Model

Due the connectivity and competitiveness of the member regions, which can be achieved primarily through the improvement of transport infrastructure and trade facilitation.¹ The reason behind this choice is based on the economic theory of regional economic integration, which goes back to Viner (1950) and Balassa (1961, 1967).

Before going through the details, the general idea of trade relation is to enhance the welfare by increasing the trade in goods and service and flows of production factors. It is well-known from classical trade theory, which is at least based on the work of Ricardo and Heckscher-Ohlin, that the abolition of all kind of trade barriers and all reductions of transaction costs increases the efficiency of all involved trading countries and the overall welfare in all concerned countries. In so far, free trade is in general a first best solution.

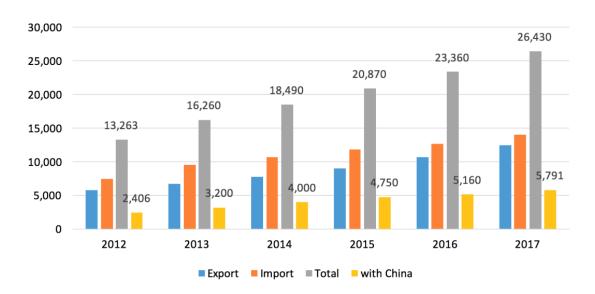
However, that does not necessarily mean that all groups inside the trading countries gain from free trade or flow of factors. According to the classical trade theory, it is only guaranteed that the aggregate consumption possibilities and aggregate production increases. Trade theory does not avoid the possibility that huge parts of a society are harmed by opening the domestic markets. A specific problem of the practical application of the open economy concept is that the production factors are not as malleable and flexible as assumed in trade models. That means an immediate implementation of free trade can cause, in reality, huge economic frictions, which leads to unemployment and breakdowns of companies and in the extreme whole economic sectors. These negative impacts can outweigh the efficiency gains in the short and mid-term run. To avoid these problems, the framework of regional economic integration was, firstly, developed by Jacob Viner (1950) who introduced the terms "trade creation" and "trade diversion" effects. The latter effect refers to the redirection of interregional flow of goods, caused by changes in tariffs and the creation of free trade areas (FTA). The former term refers to the diversion from a more efficient exporter towards a less efficient one by the change in custom tariffs and development of FTAs. Especially, the diversion effect is obviously contradicting the objective to raise efficiency. In addition, the considerations of the New Trade Theory² and the 'New' New Trade Theory³ have to be taken into account. In so far, it is important to investigate into the economic conditions and characteristics of the involved countries. An additional significant point is to take a look at the political-economic background of the participating countries, regarding the economic objectives to participate throughout the integration process. According to Balassa (196), economic integration consists of six steps until the first-best state of the world can be reached: (1) Preferential trading area (2) Free trade area, Monetary union (3) Customs union, Common market (4) Economic union, Customs and monetary union (5) Economic and monetary union (6) Fiscal union.

¹ Because of space restrictions we ignore other less important aspects like energy supply, telecommunication, electric power transmission, ICT and so on.

² See for example Krugman (1979, 1980, 1981), Brander and Spencer (1985), Dixit and Norman (1980), and Chang (2002, 2008).

³ See for example Melitz (2003), Ottaviano (2011), Shiozawa (2007), Fujimoto and Shiozawa (2011, 2012), and Antras (2004).

According to the report from Ministry of Commerce Cambodia, the total trade between Cambodia and China has increased by 12.23% in 2017, due to the tie up of Sino Cambodia relationship. According to the data from UN Comtrade, the export increases by 21.32% from \$830.5 million in 2016 to \$1007.6 million in 2017, but the trade balance deficit by \$3,775.6 million.⁴ For commodities, Cambodia exports to China such as Rice, Cassava, Textile, and imports materials for garment factory, electronic devices, machinery, textile and clothes, steel, construction materials, and other consumer goods from China.





Source: Author's calculate the data from Comtrade

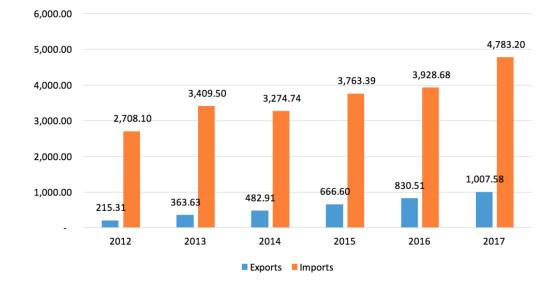


Figure 2: Cambodia-China trade (in million USD)

Source: Author's calculation of data from UN Comtrade

⁴ Data from UN Comtrade, for all commodities reported by China.

According to China-Cambodia Business Forum in Tianjin, from February 2018, Cambodia creates a cultural village in Beijing and trade centers in difference province of China. The trade relation of Sino-Cambodia become stronger up to 2017. According the talk between the Prime Minister Hun Sen and the President Xi Jinping, from 2018 on China raise quota to import rice from Cambodia by 300,000 tons annually. This is the case where Cambodia farmer improve their production for fulfill the demand from China. The GDP share by Agricultural sector is 9,401 billion riels in 2017 which grew by 7.7% (see Figure 3).

Bases on data from Ministry of Agriculture, 60% of agricultural production is crops with 45% of labor force are working in this potential sector.⁵ However, the sanitary and phytosanitary is still low which restricts Cambodia-China trade in the way of achieving their mutual trade goals, particularly when it comes to agricultural goods. Even the intention of both countries is reaching 6 billion USD trade, but China's vice minister of commerce⁶ mentioned that "Both sides highlighted that significant progress has been made in trade; however, sanitation and hygiene standards continue to be a technical barrier for the diversification of Cambodia's agricultural exports to the Chinese market, including fruits and other crops."

Furthermore, another restriction of the Cambodia agricultural product is difficulty of accessing to the market, with small scale of production. The new model of mobile trade is helpful for them to access to the market. As policy, China push for the Belt and Road Technological Innovation Action Plan with ASEAN countries and build regional transfer technology and cooperation networks. It will promote technology transfer and high-tech personnel training. It aims to provide strong technological and intellectual support for regional development.

To promoting mobile commerce in Cambodia is good only for B2B and B2C (Business in Cambodia and Customer in China or other), but it is not good idea for C2B (Customer in Cambodia and Business abroad) or C2C. For instant, according to a research, from 2015 to 2016, there are only 24 percent of rural farmers own smartphones, that number is much higher among younger people — 80 percent of smartphone owners are under the age of 35. And although phone usage in Cambodia is lower than the global average, the use of social media through smartphones is higher than the global average. While Facebook is seen an entertainment platform in much of the world, 65 percent of Cambodians turn to it for news and events, which is causing businesses in the country to find ways to boost their communication to Facebook audiences.⁷ According to a survey, there are fifty-two percent of respondents said they presently use social media, mainly Facebook, to try to find information on market prices for their goods, but only 15 percent said they actually found the information they sought. With the clear challenges in obtaining farming information, 88 percent of respondents were supportive of an agricultural app, 82% for a Facebook page, and only 73% for an agriculture-specific television program. Most wanted such information in Khmer rather than English.

As the result we can say that farmers is also interested in mobile commerce. Developing an app that rural farmers are willing and able to use would seem like the obvious option, but the failure of past efforts points to the pitfalls in this approach. However, for boosting strongly, we need to conduct a further research on this project in order to promote C2C.

⁵ The total labor force of Cambodia is 7.8 million workers.

⁶ In the fifth meeting China-Cambodia Trade and Economic Joint Committee

⁷ http://geeksincambodia.com/kh/growth-in-cambodias-mobile-penetration-changing-to-how-countrys-farmers-get-information/

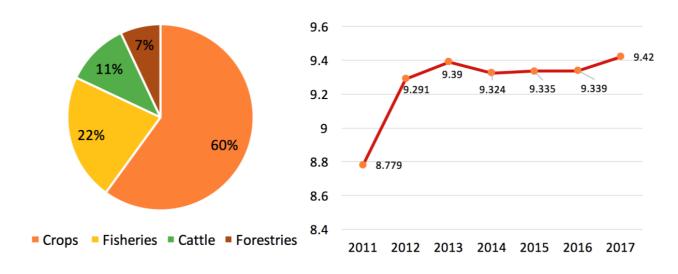


Figure 3: Rice production in Cambodia (in million h.a.)

Source: Author calculation of data from Ministry of Agriculture, Annual Report 2017.

Tourism Sector

Another potential sector for Cambodia is Tourism. According to Ministry of Tourism, Cambodia's tourism sector earned \$3.63 billion in revenue in 2017, an increase of 13.3 percent, in which international travelers visiting the kingdom spent 5.6 million, 11.8 percent more than in 2016. The increase in tourist numbers and revenue is due to the increasing number of air connections liking Cambodia to the region, particularly China.

China tops the list for most travelers by nationality, with 1.2 million Chinese tourists visiting the kingdom in 2017. It was followed by Vietnam, Laos, Thailand and Korea. Cambodia now expects to welcome at least 6 million international tourists in 2018, 7 million by 2020, and 10 million by 2025. Cambodia's "China ready" strategy has been very successful in luring visitors, and mentioned concrete achievements like the increase in Chinese-speaking tour guides.

Beside the visit of tourist, we should focus on the establishment of more tourism products, since the number of flight directly between China and Cambodia has been increased. As further cooperation I would suggest that China should invest in Cambodia on tourist sector include tourism product, hotel, restaurant, and also tour package.

Currently, China's investment in Cambodia is still less as in the table1 below. In 2017, China investment flows account for 41% of the total flow of investment in Cambodia where the most sector is in financial investment and factories, knows as garment factory.

Sectors	1	2	3	4	5	6	7	8	Total 2017	Total 2016
China Mainland	65.74	2.70	148.61	162.71	66.87	10.01	83.23	94.90	634.77	511
Hong Kong	17.25	10.5	47.72	16.55	30.94	0	113.32	113.06	349.34	237
Taiwan	0	0	24.22	106.68	0	0	27.08	10.73	168.71	105
Total	82.99	13.2	220.55	285.94	97.81	10.01	223.63	218.69	1,152.82	853
Percenta ge of total by sector	35.49%	69.25%	61.89%	30.05%	30.73%	48.59%	60.80%	54.85%	41.35%	39.58%

Table1: China Investment flow in 2017 (in million USD)

1=Agriculture, 2=Mine, 3=Factories, 4 Finance, 5=Hotel and Restaurant, 6=ICT, 7=Real Estate, 8=Others

Source: National Bank of Cambodia

For tourism supported sector, China invested in 2017 by 66.87 million USD which equals to 30.73% of the total investment flow in Cambodia on this sector, known as Hotel and Restaurant sector.

However, in 2017 the number of Chinese tourist visit Cambodia reached 1,224,782 tourists, including Hong Kong and Macau, in which female is 45.42%. This number increases by 23.40% compare to the number of Chinese tourist visited in 2016.

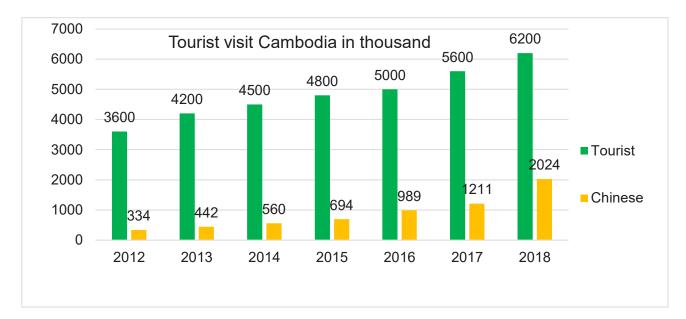


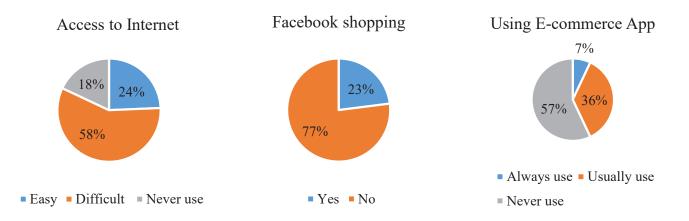
Figure 4: Number of Tourist and Chinese Tourist visited Cambodia (in million)

Source: Ministry of Tourism, Tourist Statistics Report 2012-2018

Keys Challenges

According to the survey, the data reveal that the key challenges for pushing up e-commerce in Cambodia are limitation of internet usage, knowledge of technology, confidence on e-commerce App, and payment technology.

Figure 5: The usage of App for e-commerce (Phnom Penh, Cambodia)



Source: Data reveal from the survey

The data express that 82% of people living in Phnom Penh can access to internet inwhich 58% of them cannot access easily. The quality of internet connection and data loading is the restriction of promoting e-commerce between Cambodia and China. Among the respondent, there is 77% of them using facebook. The data reveals that 57% of the respondents never using e-commerce application such as alibaba, amazon, and so on. However, they do shopping by facebook live rather than Apps.

Due the survey, 28.67% of the respondents usually use e-commerce in which 12.33% are under 25 years old, and 16.33% are in between 25 and 45. This means that, the e-commerce transaction should be done with one who are in a growing stage of income (25 to 45 years old).

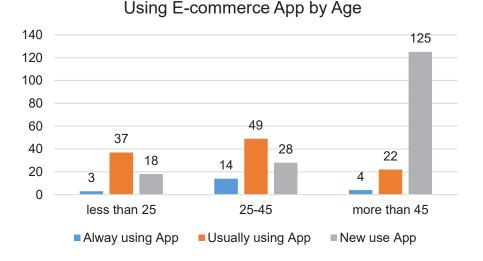
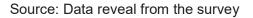


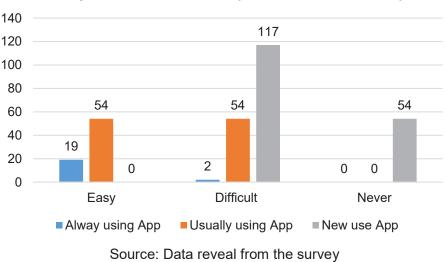
Figure 6: The using e-commerce App by Age



According to the data in the figure 6, 82.78% of people who are older than 25% never use online shopping App but about 21.19% (32 respondents) of them use to do shopping via Facebook live and Bigo live. The data also demonstrates that 87% of them are trade on clothes, footwear.

As shown in the Figure 7 below, 57% of people who are living in Phnom Penh never use App for ecommerce and 39% of them never use App due to difficulty of an internet accessibility. There are 57.67% of the respondent is difficult to access to the internet, in which 82.25% of them using mobile internet rather than Wi-Fi connectivity.





Using E-commerce App by Internet Accessibility

As mention in the survey, the term "usually using App" it meant that about 50% of time the respondent use online shopping App and another 50% use other method such as Facebook live or local mall shopping.

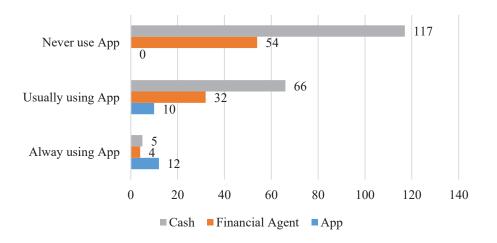
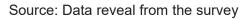


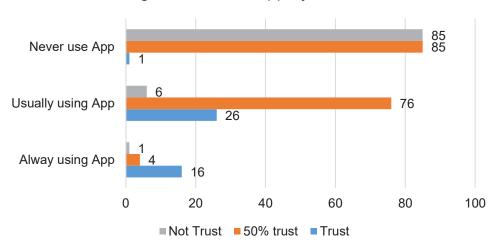
Figure 8: Using E-commerce App by Payment Method

Using E-commerce App by Payment Method



On the other hand, the payment method is one restriction for Cambodian in operating e-commerce as well as online shopping. The data shown in the Figure 8 above reveals that 57.42% of people who are always using e-commerce App uses payment App as the best method such as ABA, ACLEDA Taon Chet, Pi Pay, Ali Pay, Union Pay, and so on. Moreover, 30% of the respondents is using financial agent such as Wing, True Money, e-money to pay online shopping in Cambodia while 62.67% of them is still using cash. The reason is they are not instructed how to use Visa card or Payment App to operate the payment transaction.

Figure 9: Crosstabulation between using e-commerce App and level of confidence on App



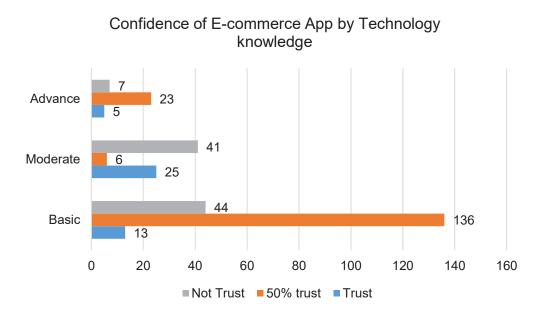
Using E-commerce App by confidence

Source: Data reveal from the survey

According to the data in the figure 9, lacking of confident is another main factor in limiting the people to use App. The data extends that 49.71% of people who are never use e-commerce App in Phnom Penh, doesn't trust the App. The reason is they are afraid of not receiving goods and services, unqualified product, and not on-time service, However, 76.19% of people who is always use App, trust the website, homepage, and so on.

The data reveals that knowledge on technology is the key important factor to influence the level of confidence of e-commerce App. In the figure 10, among 165 respondents who are only 50% trust on the e-commerce App, 82.42% is having a basic knowledge on ICT.





Source: Data reveal from the survey

However, the data shows that 34,72% of people who has moderate knowledge, trusts the App.

Moreover, the most of Cambodian people uses Cash as payment method. 62.67% of the respondents are using cash, and 30% of them using the financial agent to support the payment for e-commerce. Among those who has basic knowledge on ICT, 57.98% using cash as payment method and 37.31% using financial agent such as Wing and so on as payment method. However, the data reveals that 27.14% of those who are advancing in ICT using cash as payment method.

According to the crosstabulation in the figure 11 below, the modern payment technology is still low in Cambodia where cash payment is leading method in Cambodia. This is an restriction factor of pushing up the development of e-commerce in Cambodia.

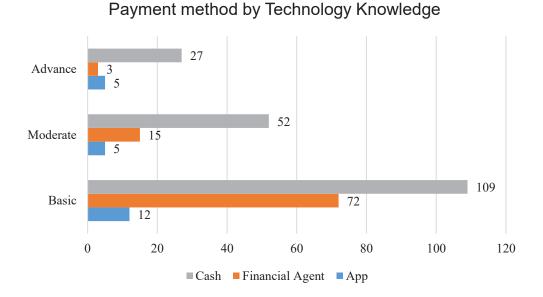


Figure 11: Crosstabulation between Payment method and ICT knowledge

Source: Data reveal from the survey

Conclusion

For our region's strategic investment plan to be successful, Cambodia and China as well as the southwestern part of ASEAN must initiate full cooperation and collaboration in line with the BRI. This will help in accelerating investment and infrastructure development. The development of mobile commerce is growing fast, account for 34.5% of the total commerce all around the world, parallel to the new generation of industry version 4.0. Cambodia China should have a project to development this stage of commerce by 4 steps. The first step is to study about the stakeholders includes individual sellers and buyers, retailers, consumers on how to use the App for trade. The second step is to build a feasible App for such level of stakeholders. The third step is to build confidence for users as well as community and society. The last one is to improve Bank usage for modern payment technology.

References

Balassa, B. (1961). The Theory of Economic Integration, London, Allew and Unwin, 1961

- Balassa, B. (1967). Trade Creation and Trade Diversion in the European Common Market. The Economic Journal 77, 1–21.
- Krugman, P. (1979), Increasing Returns, Monopolistic Competition, and International Trade, Journal of International Economics 9, 469-479
- Krugman, P. (1980), Scale Economies, Product Differentiation, and the Pattern of Trade, *American Economic Review* 70, 950-959.
- Krugman, P. (1981), Trade, Accumulation, and Uneven Development, *Journal of Development Economics* 8, 149-161.
- Krugman, Paul (1987). The Narrow Moving Band, the Dutch Disease, and the Competitive Consequences of Mrs. Thatcher. Journal of Development Economics 27, 41-55
- Ministry of Agriculture (2018). Annual Report 2017, Phnom Penh Cambodia

Ministry of Tourism (2018). Tourist Statistics Report 2017, Phnom Penh Cambodia

National Bank of Cambodia (2018) Annual Report 2017, Phnom Penh Cambodia

UN Comtrade, China Cambodia Trade Data, in https://comtrade.un.org/data/

Viner, J. (1950). The Customs Union Issue. Carnegie Endowment for International Peace

Appendix

Questionnaire

Date:	Interviewer:	Code:						
	Address:	-						
1. Age:								
□ 1. Less than 25	□ 2. 25-45	□ 3. More than 45						
2. What do you think about internet accessibility in Cambodia?								
□ 1. Easy to access	□ 2. Difficult to access	□ 3. Never use inter	net					
3. How do you connect to the internet?								
🗆 1. Wi-Fi	2. Mobile internet	□ 3. Both						
4. How often do you e-commerce application (APP)?								
□ 1. Always	□ 2. Usually □ 3. Ne	ever						
5. How do you operate online shopping the most?								
□ 1. Facebook live	2. Bigo live	🗆 3. Арр	□ 4. Never					
6. What kind of product you buy the most from online shopping?								
□ 1. Clothes	□ 2. Footwear	3. Foods	4. Accessories					
7. How do you pay for online shop □ 1. Cash	oping? □ 2. Financial Agent	□ 3. Mobile App						
8. Where is you in ICT level?								
1. Basic level	2. Moderate level	□ 3. Advanced leve	I					
9. Do you have confidence on online shopping APP?								
□ 1. Trust	2. 50% trust	□ 3. Not trust						

Thank you!

Cambodia China Trade Relations in Digital Age

