Africa Growth Initiative at BROOKINGS
AFRICAN DEVELOPMENT BANK GROUP
UNITED NATIONS UNIVERSITY
UNU-WIDER
World Institute for Development

LEARNING TO COMPETE

Working Paper No. 7

Economic history of industrialization in Cambodia

Sokty Chhair[1] and Luyna Ung[2]

Abstract

The industrialization which started in 1953 had been completely disrupted by the chronic civil war and closed-door policy of successive communism/socialism regimes. Since 1993 Cambodia has embraced a market economy heavily dependent on foreign capital and foreign markets. As a result, the economy has experienced high economic growth rate yet with low linkage to domestic economy. The government's Rice Export Policy introduced in 2010 to diversify its economy, maximize its value added and job creation was highly evaluated to bring those benefits under the environment of weak governance. Whether similar kind of such a policy for other sectors is successful remains to be seen.

Keywords: industrialization, mixed economy, cooperative, garment sector, Cambodia
JEL classification: L2, L52

[1]Cambodian Economic Association; [2]Supreme National Economic Council; corresponding author email: chhairsokty@yahoo.com.

Learning to Compete (L2C) is a collaborative research program of the Africa Growth Initiative at Brookings (AGI), the African Development Bank, (AfDB), and the United Nations University World Institute for Development Economics Research (UNU-WIDER) on industrial development in Africa. Outputs in this Working Paper Series have been supported by all three institutions.

AGI-Brookings is grateful for the contribution of an anonymous donor for funding its work under the collaborative research program.

1 Introduction

Cambodia emerged a newly independent nation in 1953 with ambitions for growth and development through the expansion of industry. Sixty years after, following decades of war and destruction, these ambitions are beginning to be realized with double-digit growth rates and an expansion of business and economic activity.

This paper sets out the historical evolution of the economy of Cambodia and documents the political and economic events that led to its current economic structure. Over the last 60 years Cambodia has experienced a number of very different political ideologies which strongly influenced its industrial policy of the time. In Section 2 we describe each of these regimes, focusing on the development of the industrial sector and the successes and failures that characterize the time. The main regimes are: (i) the Sihanouk Regime (1953–70), which attempted to foster industrial development through a mixed approach of encouraging private capital and enterprise coupled with state investment; (ii) the Khmer Republic (1970–75), which adopted a laissez faire approach but was ravaged by civil war; (iii) Democratic Kampuchea (1975–79), which saw the rise to power of the Khmer Rouge leading to nationalization, deindustrialization, genocide, and the destruction of all private capital; (iv) the People's Republic of Kampuchea (PRK) (1979–89), a socialist regime with a focus on agriculture that remained closed to the world economy; (v) the State of Cambodia and the UN Period (1989–93), a transition period to a market economy; and (vi) the Kingdom of Cambodia (1993 to present day), a market economy mainly based on foreign investment and foreign markets.

For the period before the civil war in 1970 limited documented evidence exits and so we rely on three *leftist* economic scholarly works by Hou (1955), Khieu (1959), and Hu (1963). Among them, only Khieu (1959) focuses on industry. Moreover, most historians tend to focus on political history rather than economic history due to the incidence of chronic civil war, genocide, the UN-brokered international peace settlement, democracy, governance, and other political issues during the last four decades. Exceptions include Slocomb (2010), Ear (1995), and Vickery (1986). We draw heavily from these works in our review of the industrial sector and economy in general in the period up to 1993. After 1993, many additional sources are available.

Since the 1993 election, overseen by the United Nations (UN), Cambodia has been in transition to a full market economy, following decades of war and isolation from international markets by a socialist regime. It is since then that an expansion of industry has been observed. In Section 3 we document this growth and development focusing on the structure of industry in terms of output and employment and the characteristics of enterprises. We also document the key *sunrise* sectors including tourism, banking, rice production and processing, and rubber plantations. Particular focus is also placed on the garment sector, the sector for which Cambodia is perhaps most known from an international perspective.

In Section 4 we provide an overview of the various policies in place to address the growing needs and priorities of this industrializing nation. We address industrial policies specifically but also discuss the various macroeconomic, trade, regulatory and labour market policies of relevance. The paper concludes with a discussion of the key opportunities and challenges facing Cambodia, most notably the need to develop industry further and in a new direction that promotes local business, produces more value added, creates more links with the domestic economy and meets international labour standards.

2 Evolution of industry: a historical perspective

2.1 Sihanouk regime (1953–70)

Cambodia gained full independence from France in 1953. During the French colonial era (1863–53) emphasis was placed on agriculture and as such the newly independent Cambodian economy began with a low industrial base. The colonial administration focused on household-based rice cultivation, the development of large rubber plantations and the integration of the economy of Cambodia to the French economy.[1] Some factories were established to supply the domestic market, including textiles, paper and foundries, but most depended on imports for raw materials and were foreign-owned or owned by the elite Chinese ethnic group.

The focus of the newly independent Cambodian state that emerged in 1953 was on building Cambodia's industrial base. It was attempted to achieve this through a policy of modernization which was the trend in the newly independent states in Asia and Africa at that time. The Two-Year Plan (1956–57), also known as the 'Plan of study, reflection and experimentation' and the first Five-Year Plan (1960–64) were introduced. The Two-Year Plan (1956–57) concentrated on developing infrastructure while the Five-Year Plan (1960–64) focused more on building factories (Delvert 1963). Slocomb (2010) documents how during the Sihanouk regime, Cambodia largely accepted economic coexistence with foreign interests, hiring foreign personnel to fill the posts formally staffed by the French administration during the French colonial era and accepting foreign capital investments. The economy could best be described as a mixed-economy which merged individual capital and enterprise with state capital and supervision. The state created enterprises to break the monopoly of local Chinese merchants in purchasing agricultural products and selling them to villagers. State co-operatives in the countryside also operated their own credit programmes which historically were monopolized by the Chinese. Table 1 shows a significant increase in the number of factories between 1955 and 1968, from none to 28 state-owned factories and 29 joint-venture factories (private and public ownership) while small and medium private factories increased dramatically from 650 in 1965 to 3,700 in 1968.

Table 1: The number and classification of factories between 1955 and 1968

	1955	1968
State-owned factories	0	28
Joint-venture factories (private and public ownership)	0	29
Small and medium private factories	650	3,700

Source: based on Cambodge (1970) cited in Ear (1995: 49).

[1] The first railway was built in 1922 by France connecting the northeastern part of the country, known as the rice bowl of Cambodia, to Phnom Penh, the capital city. The purpose of the railway was to integrate Cambodia's economy to the world, rather than to promote development within Cambodia. In 1939, according to Khieu (1959), 80 per cent of the volume of products transported by the railway were destined for abroad. Only remaining 20 per cent were shipped to the rest of the country.

During the Cold War, Cambodia experienced significant investment in infrastructure largely financed by donor interests. As a peaceful island surrounded by war-torn countries in Indochina it was a strategically important location from a military perspective, particularly given the neutral foreign policy adopted by Prince Sihanouk during the 1960s. As a result Cambodia saw its foreign assistance increase from donors on both sides of the Cold War. With this heavy assistance, several megaprojects were built: the highway linking the capital city, Phnom Penh, and the port city of Sihnoukville was built with American aid and the port itself with French funding; France and Germany jointly funded railway construction connecting Phnom Penh to Sihnoukville; a 10,000 kilowatts Kirirom hydroelectric plant was constructed with a loan from Yugoslavia; while a plywood factory was built with Chinese aid (Slocomb 2010). In addition, the Chinese built a 5,000 ton paper mill, a textile factory, and a large cement factory. Three other factories were built by the Czech: a palm sugar refinery in Kampong Speu, a tire factory at Takhmau in Kandal, and a tractor assembly plant in Sihanoukville. In the Five-Year economic plan (January 1960 to December 1964), only 2 per cent of the budget was contributed by Cambodia, 57 per cent of the contribution was from the USA, 23 per cent from China, and 17 per cent from France.

While infrastructure improved, along with the number of enterprises, there was little by way of structural change evident in the aggregate figures. As illustrated in Table 2, manufacturing accounted for 8.6 per cent of GDP in 1962, increasing to 10.5 per cent in 1966, and 12 per cent (including mining) in 1968 (see Figure 1). Agriculture remained at around 41 per cent of GDP throughout these years. Overall, the economic structure changed very little between 1966 and 1968. Cambodia's exports overwhelmingly depended on primary products. Rice and rubber were by far the largest exports, accounting for more than half of total exports.

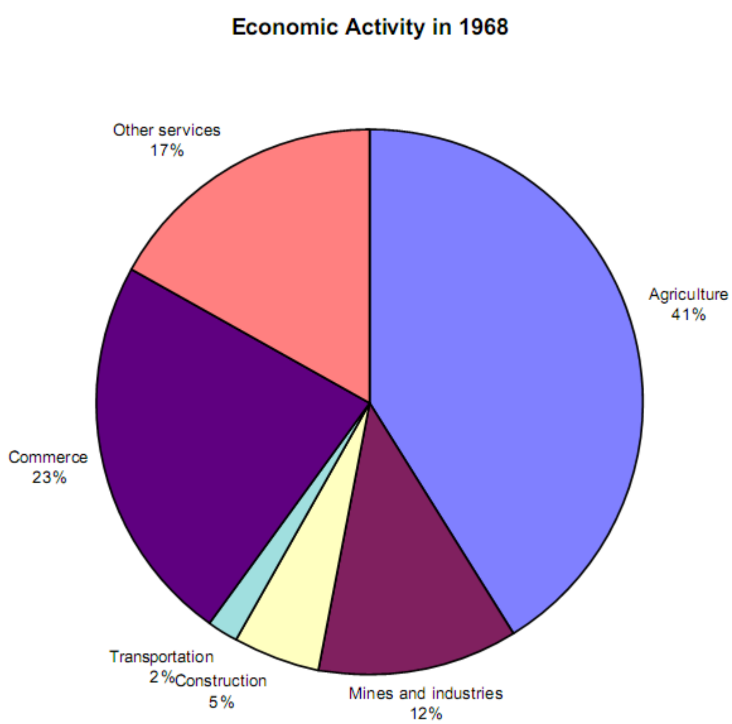
The removal of protective tariffs at the end of 1969 heavily hit small enterprises, which accounted for 90 per cent of firms at this time. Due to the protective industrial policies many firms could not compete when being exposed to foreign markets. Only a handful of large investors benefited from the policy change but they too were affected by inflation and rising labour costs. Efforts were made to industrialize further through a policy of import-substitution but this had little success due to the prevailing inefficiencies of state-owned enterprises. The survival of these enterprises had mainly been sustained by heavily protected tariffs. By the end of this era the economic structure of Cambodia appeared similar to the economy of the newly independent economy in 1953.

Table 2: Sector share of GDP at 1966 prices, in %

	1962	1966
Agriculture	30.7	30.3
Animal husbandry	4.3	4.9
Fishing	2.4	2.3
Forestry	3.9	3.5
Salt mining	0.1	-
Manufacturing	8.6	10.5
Energy and water supply	0.9	1.1
Construction	6.8	5.3
Transportation	2.0	2.1
Commerce	23.8	22.2
Public administration, defense, and financial institutions	13.1	14.4
Other services	3.4	3.4

Source: Ministry of Planning (1966) cited in Slocomb (2010).

Figure 1: Sector share of GDP in Cambodia, 1968



Source: based on Chantrabot (1993) cited in Ear (2009: 49).

2.2 Khmer Republic (1970–75)

From 1970 Cambodia was plunged into a civil war with each side supported by either China or the USA. However, even before the regime change in 1970, the leaders of the coup, General Non Nol and Sisowath Sirik Matak, who would be the new leaders in the new regime, led the *national salvation* government from August 1969 charged with the responsibility of reviving the stagnant economy which emerged from the Sihanouk regime.

The new policy, which embraced *laissez fair,* involved devaluing the currency, removing state controls on foreign trade and banking, and reducing state involvement in enterprise. In other words, the most significant change to industrial policy was the disengagement of the public sector and the emphasis on private enterprises as the mechanism for commercial and industrial development (Slocomb 2010). Rice and maize production were liberalized with the dissolution of state monopoly over the export of grains and cereals. The state only remained the monopoly power in the production and distribution of electricity above 500 kilowatts, military-related sectors, railway, postal services, and telecommunication services.

These policies were, however, short-lived and their implementation was interrupted by the civil war. The price of necessities was fixed and controlled by the state and the state kept its exclusive monopoly over all main primary products such as rice, maize, rubber, and precious or semi-precious stones. The wartime economy depended solely on foreign assistance, mostly from the USA, for survival.

Table 3 highlights the impact that the civil war had on the agricultural production for rice, rubber, and corn leading to significantly lower yields. The manufacturing index which had been 100 in 1960 fell to 73 in 1972.

Table 3: Agricultural production in hundreds of thousands of metric tons, 1968–74

	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74
Rice	2,503	3,814	2,732	2,138	953	762
Rubber (tons)	51	52	13	1	15	12
Corn	117	137	121	80	73	-
Palm sugar	-	34	23	-	-	-

Source: based on Ear (1995).

2.3 Closed economy (1975–89)

The period spanning 1975 and 1989 consisted of two rival regimes both of which followed a Marxist ideology. Slocomb (2010) describes Cambodia during this period as a *revolutionary* economy. Both regimes closed the door to foreign investment and markets and their priority sector was agriculture with industry playing only a supporting role in supplying agricultural implements and processing agricultural products. The extent to which the two regimes adopted Marxism was their main distinction. The former was much harsher and *dogmatic* while the latter was more *pragmatic* and responsive to local conditions.

Democratic Kampuchea (1975–79)

The Khmer Rouge came to power influenced heavily by Maoist ideology. The ambition was to make the transition to communism in Cambodia in the shortest possible time period. The economic policy was to demolish capitalists, enslave the labour force and focus on the rapid development of agriculture. To achieve this, the regime completely and immediately collectivized agriculture, nationalized all sectors of the economy, and adopted a policy of self-reliance. All assets were owned by the state and all international involvement was removed. This new policy completely reversed the economic policy adopted by the previous regime which represented a shift from one extreme pole of economic ideology to the other. Phnom Penh and other provincial cities were emptied and the urbanites were forced to work as collective farmers in the countryside. Private ownership was completely banned and money was eliminated. From 1975 to 1979, the bourgeoisie class was considered an enemy of the state and entrepreneurship disappeared. The regime also banned all international trade leaving only very limited trade with a few allied communist countries.

People's Republic of Kampuchea (1979–89)

After the liberation of Cambodia from the Khmer Rouge regime, the new regime, the PRK was left with little to restore the Cambodian economy. The economy was dominated by subsistence agriculture with little or no industry[2]. The first priority of the PRK was food and self-sufficiency in an economy where human and physical infrastructure had been destroyed, and a guerrilla war with the Khmer Rouge, who was still at large along Cambodia's border with Thailand, persisted. Engineers, skilled workers, and other human resources had either fled to other countries as war refugees or fell victims of genocide.

From 1979–89, economic policy focused on food security and the eradication of hunger throughout the country. State-owned enterprises were re-established, which included tobacco, cotton, and electricity companies, a mechanical workshop, spare parts, beverage and glassware factory, and a tire factory, all with the aim of providing basic consumer goods and public utilities. State enterprises frequently sold products at subsidized prices and/or offered them as rations for government officials. The state subsidized prices for some basic commodities such as kerosene, cigarettes, soap, rice, sugar, and condensed milk. During the 1980s, informal trade and smuggling were widespread.

According to Vickery (1986: 128–29), there were three economic organizations that coexisted in the economic system adopted by the PRK. First, there was the state which controlled large industry, finance, transport, official foreign commerce, and some large agricultural plantations. Second, there were the collectives, called solidarity groups, which controlled agricultural production such as land and agricultural equipment. Third, there was the family which involved small trade, handicraft, and side agricultural works which households could engage in once they finished their obligations to the solidarity group. In 1986, 97 per cent of the rural population were in the collective sector which was composed of more than 100,000 solidarity groups each of which consisted of seven to fifteen families. This was not enough, however, to feed the population of Cambodia and immediate food relief was provided by Vietnam, the Soviet-bloc countries and international humanitarian aid organizations.

In 1988, the total value of industrial production, including handicraft was only US$20 million but it was dominated by state-owned enterprises (Slocomb 2010: 215). The share of industry in GDP was only 5 per cent in 1985 compared to 19 per cent in 1969 (Cosslet 1990) while the share of agriculture in GDP increased to 90 per cent in 1985. Until 1985, only about half of the pre-war plants had reopened and the ones that did produced far below full capacity due to frequent

[2] During the period of the PRK regime, only 63 out of 85 enterprises in Cambodia were potentially operational but only 12 factories were functioning producing textiles, tires, plastics, and iron tools with raw materials supplied by international non-governmental aid agencies (Slocomb 2010: 215).

electricity power cuts and a lack of spare parts and raw materials (Cosslet 1990). In 1988, the share of state-owned manufacturing output was around two-thirds of all manufacturing output.

2.4. State of Cambodia and the UN period (1989–93)

With the fall of the Soviet Union and the Eastern Bloc and the reform of Vietnam's economic policy, *Doi Moi*, beginning in 1986, Cambodia began the gradual process of economic reform. The process of reform toward becoming a market economy was compounded by the signing of the Paris Peace Accords in October 1991. As part of the peace agreement the government of Cambodia relinquished the role of rehabilitation and reconstruction to the UN. The priority for the rehabilitation phase was social development and the provision of basic needs such as food security, health, housing, training, education, public utilities, and basic transport infrastructure. During the reconstruction phase entrepreneurship and private sector development was also promoted to prepare for entry into a free market economy.

The International Committee on the Reconstruction of Cambodia, a consultative body which included the government, donors, and other involved parties, monitored the process of transition. This body, which later evolved into the consultative group, met annually to provide loans and grants for development, on the condition of reforms being implemented by the government. Through these reforms Cambodia's political and economic development moved from a command to a laissez faire capitalist economy, from a large to a small bureaucracy, and from domestic to export-oriented production (Slocomb 2010: 289). In the mid-1980, Cambodia introduced private property leading to the gradual privatization of state-owned companies and the de-collectivization of agriculture.

Table 4 illustrates some of the success of this period with GDP experiencing strong growth in 1988 at 9.8 per cent, a slowdown in 1989 and 1990, and a recovery thereafter largely driven by the buildup of the UN operation. Agriculture contributed slightly over half of GDP during this time while the service sector accounted for around 33 per cent of output and industry 15 per cent.

These successes and market reforms were, however, undermined by macroeconomic imbalances caused by declining state revenue due to the increased unit cost of goods and services procured for operations and investments, the removal of humanitarian aid and credit from the Soviet Union, and high inflation caused by monetary financing of the budget deficit (Royal Government of Cambodia 2009). As a result, the inflation rate accelerated from 70 per cent in 1989 to 200 per cent in 1992 (see Table 5). Inflation was stabilized in 1993 through reductions in the government deficit (Irvin 1993) but the high inflation rate of the previous years led to a decline in public confidence in the national currency and the permanent dollarization of the economy.

Table 4: Real GDP growth and share of GDP, 1988–92

	1988	1989	1990	1991	1992
Real GDP growth rate					
GDP	9.8	3.5	1.2	7.6	6.9
Agriculture	5.9	7.1	1.2	6.7	4.8
Industry	15	1.8	-2.1	8.9	8.4
Services	13.6	-1.1	2.7	8.4	9.5
GDP by sector					
Agriculture	50.5	52.2	52.3	51.8	50.8
Industry	15.7	15.4	14.9	15.1	15.3
Services	33.8	32.4	32.8	33.1	33.9

Source: based on Irvin (1993).

Table 5: Inflation rate, 1989–92

Year	1989	1990	1991	1992
Rate (%)	70	157	121	200

Source: based on Ear (1995).

2.5 Kingdom of Cambodia (1993–present)

After the first general election in 1993, the Government prepared and implemented a comprehensive macroeconomic policy and structural reform programme with efforts to integrate Cambodia's economy into the region and the world. In the late 1980s, Cambodia began the process of market liberalization. The state monopoly to foreign trade was abolished in 1987, and the foreign investment law was brought into force in 1989, enabling private companies to engage in foreign trade. In the early 1990s, trade policies were further liberalized, largely removing restrictions on firms and individuals engaged in international trade. Most quantitative restrictions and the licensing of imports were eliminated. In the late 1990s, there was a more deliberate phase of positive steps towards a highly liberal trade regime.

To promote industrial development, the government provided generous incentives to attract foreign direct investment (FDI) and at the same time strived to find export markets for FDI-manufactured products. Tax exemptions were provided on imported intermediate goods and on the exporting of finished goods. Cambodia became a member of the ASEAN Free Trade Area in 1999 and eventually the World Trade Organization (WTO) in 2003. Membership of these organizations placed further requirements on Cambodia to liberalize trade in goods and services and foreign capital ownership. FDI has played a significant role in creating a production base, especially to exploit trade opportunities in advanced economies. The inflow of FDI increased from just US$124 million in 1993 to US$520 million in 2009 and to over 1,500 million in 2012 (author's calculations based on database of the Ministry of Economy and Finance).

Many state-owned activities have been terminated and only economically viable enterprises are allowed to continue. Public enterprises compete with the private sector in the area of utilities, education, and transportation and most only survive due to geographical constraints to regional and world competition. According to authors' calculation based on the Economic Census (EC 2011) conducted by the National Institute of Statistics (NIS) and the Ministry of Planning in March 2011, private establishments accounted for 96 per cent of the total number of establishments and 90 per cent of the number of persons engaged in 2011, while state-owned establishments accounted for less than 3 per cent of the total number of establishments and 8 per cent of the number of persons engaged.

Economic growth during 2004–08 averaged 10.3 per cent (Hang 2009). Cambodia's growth performance ranked 7th across all countries in the world and has higher exports per capita than other countries at Cambodia's level of economic development (World Bank 2009). While the ratio of investment and saving to GDP is low it has been increasing.

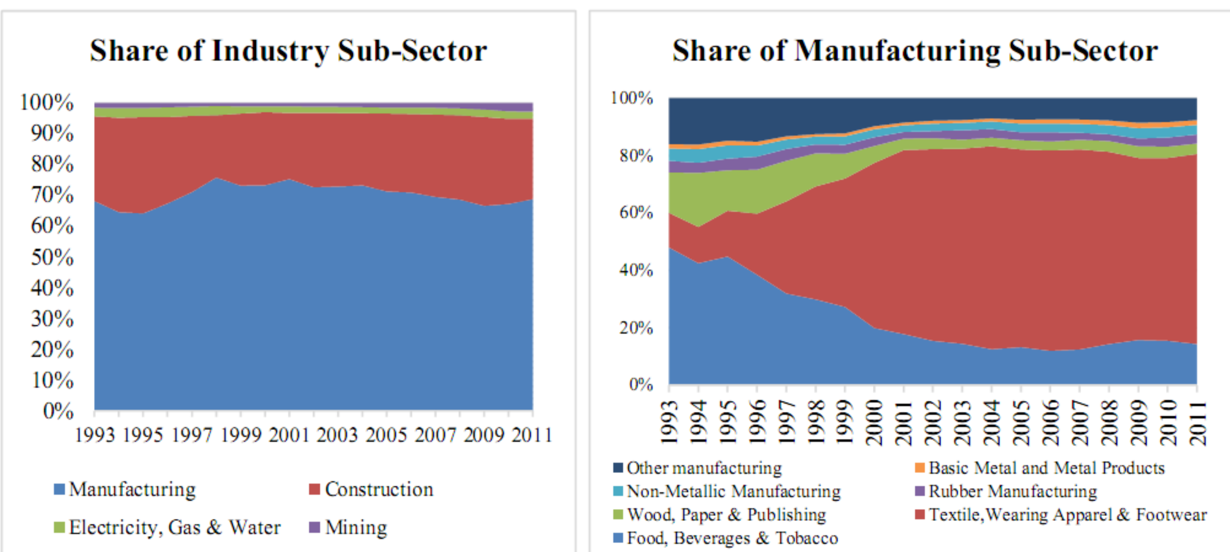
Key risk factors for Cambodia's economic development include its dependence on a few key sectors such as garments, agro-processing, tourism and construction, which are vulnerable to international markets, coupled with the fact that technological spillovers and economic linkage from foreign firms to other sectors of economy are low. The government in recent years has begun to promote local micro, small, and medium enterprises, and increase the value added of the production chain.

3 The structure of industry

3.1 Sectoral composition

Section 2 documented the evolution of industrial policy and industry since independence in 1953. As highlighted it was not until the early 1990s that industrial development was given prominence in economic policy. As illustrated in Figure 2, the share of industry increased from 12.6 per cent in 1993 to around 22.6 per cent in 2011. The growth in the importance of industry in GDP can be categorized into four different phases of development summarized in Table 6.

Figure 2: Share of industry and manufacturing sub-sector



Source: author's calculations based on database of the National Account from NIS.

Table 6: Phase of industrial development

Period	Ratio of manufacturing to GDP, in %	Remarks
1993–98	12–16	First general election to Asian Financial Crisis
1999–2003	18–25	Full peace period, ASEAN Membership
2004–07	>25	Post-WTO accession
2008–present	21–22	Global financial crisis

Source: authors' calculations based on database of the National Account from NIS.

The first phase, 1993–98, saw an increase in the share of manufacturing to GDP from 12 per cent to 16 per cent. This period begins after the first general election in 1993 and lasted until the Asian financial crisis and the domestic military clash in 1997 and represented the first growth period for the manufacturing sector in Cambodia. The second phase was from 1999–2003, when growth in the manufacturing sector escalated after Cambodia achieved full peace throughout in 1998 and successfully integrated into ASEAN in 1999. The ratio of manufacturing to GDP reached almost 25 per cent. At the end of 2003, growth in the garment sector, the driver of the manufacturing sector, faced uncertainty due to the expiration of the multi-fiber agreement. The third phase of manufacturing development began in 2004 when Cambodia became a member of the WTO. During this phase, the share of the manufacturing sector in the economy reached its peak of more than 25 per cent of GDP. During the fourth and most recent phase the fast growth rate of the manufacturing sector has subsided in the aftermath of the global financial crisis.

Cambodia's industrial sector is dominated by manufacturing and construction, which accounted for 70 per cent and 20 per cent, respectively, in 2011. Food, beverages and tobacco (FBT) and textile, wearing apparel and footwear (TWF) together account for 80 per cent of value added of the manufacturing sector. The share accounted for by TWF has grown from barely 20 per cent in 1993 to around 60 per cent while the share accounted for by FBT has dropped from almost 50 per cent in 1993 to just about 25 per cent in recent years. It is also worth noting that the manufacturing of wood, paper and publishing has also been in decline due to the rapid decline of forested areas.

Table 7 illustrates the percentage of establishments by sub-sector of industry. In 2011, the number of industrial establishments was 77,048, of which the share of manufacturing was 93 per cent based on EC2011.

Table 7: The number and percentage of establishments by sub-sector of industry

Type of industry	ISIC Rev4	Number	Percentage
Mining & quarrying	0710-0990	178	0.23
Food, beverage and tobacco	1010-1200	32,257	41.87
Textile, wearing apparel and footwear	1311-1520	25,156	32.65
Wood, paper and printing	1610-1820	2274	2.95
Chemical and medicines	1910-2100	159	0.21
Rubber, plastic, cement, metals and casting	2211-2432	2,910	3.78
Machinery components assemblies	2511-2790	4,740	6.15
Vehicle assemblies	2811-3099	104	0.13
Furniture and handicraft	3100-3290	3,031	3.93
Repairs	3311-3320	938	1.22
Electricity, water and waste collection	3510-3900	5,112	6.63
Construction	4100-4390	189	0.25
Total		77,048	100.00

Source: authors' calculations based on EC2011 from NIS.

3.2 Size of firms

The number of enterprises in Cambodia has been increasing gradually, tracking the expansion of the economy, especially during the period of two-digit growth rates from 1999 to 2008. In 1999, the number of small and medium enterprises (SMEs)[3] was estimated at about 25,000, and reached 36,000 in 2009. The growth in the number of establishments was about 44 per cent in ten years. During this period, employment in the industrial sector expanded, and labour productivity in the sector increased significantly. Despite rapid growth, the sector is still dominated by micro establishments. In 2011, micro establishments accounted for 92.10 per cent of all establishments providing 47.90 per cent of jobs and generating 40.08 per cent of total value added while large establishments accounted for only 0.32 per cent of the total but provided 29.64 per cent of jobs and generated 42.32 per cent of total value added (see Table 8).

Table 8 reveals that there were 524,572 establishments in Cambodia as of March 2011 and the number of persons engaged in these establishments was 1,725,671. Compared to the Nation-Wise Establishment Listing of Cambodia 2009 (EL 2009) which was also conducted by NIS, this was an increase of 27.65 per cent in the number of establishments and of 17.42 per cent in the numbers employed. There were 89,580 new establishments which started business between 01 January 2009 and 01 March 2011. However, 86.1 per cent of the new establishments were enterprises with one or two persons. On average, the number of persons engaged in establishments is 3.4 in 2011.

[3] Firms with less than five employees are defined as micro establishments; between five and 20 employees as small establishments; between 20 and 50 employees as medium establishments; and over 50 employees as large establishments.

Table 8: The number of establishments, employment, and annual revenue by firm size, 2011

Firm size	Number of establishments	%	Number of employees	%	Annual revenue US$ '000	%
Micro	483,128	92.10	826,579	47.90	5,010,000	40.08
Small	36,177	6.90	283,825	16.45	1,400,000	11.20
Medium	3,612	0.69	103,809	6.02	787,000	6.30
Large	1,655	0.32	511,458	29.64	5,290,000	42.32
Total	524,572	100	1,725,671	100	12,500,000	99.90

Source: authors' calculations based on EC2011 from NIS.

As revealed in Tables 8 to 11, it is clear that micro establishments dominate the Cambodian economy. In EC2011, over 92 per cent of all establishments were micro establishments. Likewise for industrial establishments, micro industrial establishments made up over 90 per cent of total industrial establishments. SMEs of industrial establishents accounted for about 8.34 per cent and less than 0.69 per cent of industrial establishments were considered large enterprises.
In Table 9, the share of employment in large industrial establishments is 65.50 per cent and these establishments generate 78 per cent of value added. This suggests that the foundations for large industry are strengthening while micro, small and medium industrial establishments are struggling to survive. Moreover, in Table 12, we see that 406 out of 612 large industrial establishments are in TWF.

Considering only industrial establishments in Table 11, we observe a 16 per cent decline in the number of establishments between 2009 and 2011. Subdividing by firm size, these figures mask a 20 per cent increase in the number of large industrial establishments.

Table 9: Number of industrial establishments, employment and annual revenue by firm size, 2011

Firm size	Number of establishments	%	Number of employees	%	Annual revenue US$ '000	%
Micro	70,008	90.86	131,845	23.80	310,000	9.34
Small	5,898	7.65	44,031	7.95	216,000	6.51
Medium	530	0.69	15,279	2.76	204,000	6.14
Large	612	0.79	362,903	65.50	2,590,000	78.01
Total	77,048	100	554,058	100	3,320,000	100

Source: authors' calculations based on EC2011 from NIS.

Table 10: Growth in number of establishments and employees by firm size, 2009–11

Firm size	Number of establishments			Total employment		
	EL2009	EC2011	Growth rate %	EL2009	EC2011	Growth rate %
Micro	330,528	483,128	32.96	642,230	826,579	28.70
Small	41,282	36,177	-12.37	306,139	283,825	-7.29
Medium	3,512	3,612	2.85	99,431	103,809	4.40
Large	1,439	1,655	15.01	421,912	511,458	21.22
Total	376,761	524,572	27.65	1,469,712	1,725,671	17.42

Source: authors' calculations based on EL2009 and EC2011 from NIS.

Table 11: Number of industrial establishments and employees by firm size, 2009–11

Firm size	Number of establishments			Total employment		
	EL2009	EC2011	Growth rate %	EL2009	EC2011	Growth rate %
Micro	80,931	70,008	-13.50	166,954	131,845	-21.03
Small	9,516	5,898	-38.02	64,332	44,031	-31.56
Medium	540	530	-1.85	15,365	15,279	-0.56
Large	509	612	20.24	298,980	362,903	21.38
Total	91,496	77048	-15.79	545,631	554,058	1.54

Source: authors' calculations based on EL2009 and EC2011 from NIS.

Table 13 compares the proportion of industrial establishments by firm size in 2003 in the Investment Climate Survey in 2003 (ICS2003) conducted by the World Bank. If truly representative of economic activity the figures suggest that the share of small and medium industrial establishments declined from 42.5 per cent and 11.25 per cent to only 10.43 per cent and 3.62 per cent, respectively in 2011. However, the share of value added of small and medium industrial establishments increased from 1.27 per cent and 2.80 per cent in ICS2003 to 7.18 per cent and 6.78 per cent, respectively in 2011. It should be noted, however, that we exclude establishments with less than five employees from the EC2011 data to be comparable with ICS2003, which did not include establishments with less than five employees. This suggests that SMEs have an increasing role in generating value added.

Table 12: The number of establishments in selected industrial sectors by size

Type of industry	ISIC Rev4	Micro	Small	Medium	Large
Mining & quarrying	0710-0990	83	69	19	7
Food, beverage and tobacco	1010-1200	30,396	1,742	76	43
Textile, wearing apparel and footwear	1311-1520	23,306	1,323	121	406
Wood, paper and printing	1610-1820	1,919	283	33	39
Chemical and medicines	1910-2100	84	50	9	16
Rubber, plastic, cement, metals and casting	2211-2432	2,023	658	184	45
Machinery components assemblies	2511-2790	3,843	877	12	8
Vehicle assemblies	2811-3099	74	25	1	4
Furniture and handicraft	3100-3290	2,734	277	8	12
Repairs	3311-3320	851	84	2	1
Electricity, water and waste collection	3510-3900	4,616	421	51	24
Construction	4100-4390	79	89	14	7
Total		70,008	5898	530	612
Share of total		90.86%	7.65%	0.69%	0.79%

Source: authors' calculations based on EC2011 from NIS.

Table 13: Share of employment and value added of industrial establishments by firm size, in %

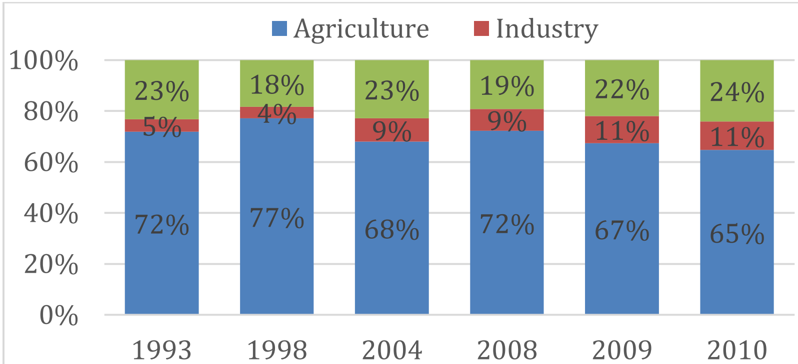
	Employment			Value added		
Firm size	Employment 5 or more	Employment 5 or more	All	Employment 5 or more	Employment 5 or more	All
	ICS2003	EC2011	EC2011	ICS2003	EC2011	EC2011
Micro		-	23.80		-	9.34
Small	42.50	10.43	7.95	1.27	7.18	6.51
Medium	11.25	3.62	2.76	2.80	6.78	6.14
Large	46.87	85.95	65.50	95.75	86.05	78.01

Source: authors' calculations based on ICS2003 from World Bank and EC2011 from NIS.

3.3 Employment

Estimates of employment in Cambodia are less reliable due to high levels of migration both within Cambodia and internationally. In this section we use data from many selected years of the annual Cambodia's Socio-Economic Surveys (CSESs), which ask the main occupation within the 12 months of each member of the households surveyed, to measure the percentage share of the three main sectors in the economy. According to this estimation, the share of employment in agriculture declined from nearly 72 per cent in 1993 to 65 per cent in 2010. The increasing rate of industrial development is reflected in employment generation in the sector with industry accounting for 11 per cent of employment in 2010. These changes highlight the transformation of the economy from an agriculture base to an industrial and service base.

Figure 3: Share of employment by three main sectors



Source: authors' calculations based on database of CSESs in 1993, 1998, 2004, 2008, 2009, and 2010 from NIS.[4]

Table 14 reveals that there were 77,048 establishments in the industrial sector which employed 554,058 persons in 2011.[5] TWF accounted for 67.56 per cent of industrial employment and FBT accounted for 15.16 per cent. The share of employment in construction was low at 0.37 per cent.

Table 14: Share of employment in sub-sectors of industry, 2011

Type of industry	Number of establishment	Number of employment	%
Mining & quarrying	178	2,036	0.37
Food, beverage and tobacco	32,257	84,008	15.16
Textile, wearing apparel and footwear	25,156	374,339	67.56
Wood, paper and printing	2,274	12,467	2.25
Chemical and medicines	159	9,814	1.77
Rubber, plastic, cement, metals and casting	2,910	20,014	3.61
Machinery components assemblies	4,740	15,643	2.82
Vehicle assemblies	104	1,895	0.34
Furniture and handicraft	3,031	10,492	1.89
Repairs	938	2,393	0.43
Electricity, water and waste collection	5,112	18,909	3.41
Construction	189	2,048	0.37
Total	77,048	554,058	100

Source: authors' calculations based on EC2011 from NIS.

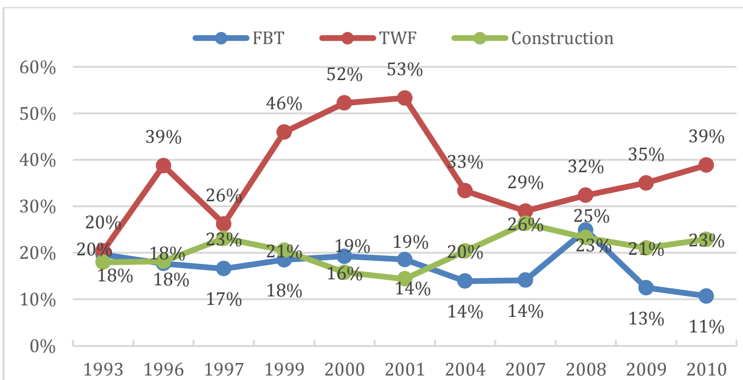
It is possible that the EC2011 suffers from underreporting on the number of workers employed by enterprises. The estimation of industrial employment is only 550,000 comparing to 600,000 according to the 2008 population census 2008. Based on the CSES in 2010, the numbers employed in industry should be at approximately 900,000 suggesting that there may be establishments (most likely informal) that are not captured by EC2011. According to the CSESs,

4 Based on the same question on last year's main occupation.

and as revealed in Figure 4, the share of employment in TWF increased from around 20 per cent in 1993 to a peak of 53 per cent in 2001. The drop in share in 1997 was due to a political conflict that forced many garment factories to close. The share dropped to about 31 per cent in 2004 during discussions on the expiration of the MFA agreement that led to direct competition between Cambodia and China. The share of employment in TWF reached 40 per cent again in 2010. The FBT maintained a relatively stable share of employment of around 20 per cent from 1993 to 2001. The share dropped in 2004 and 2007 but increased again in 2008 around the time of the international food price increases. However, the share dropped back to around 10 per cent in 2010.

The share of employment in construction was around 20 per cent in 1993 and reached 25 per cent in 2010. It should be noted that employment in construction is seasonal in nature which is one possible reason why EC2011 under-reports the number of construction workers. Most employment in construction is project-based and so does not involve a permanent and secure job in a particular establishment. The estimate of permanent employment in the population census in 1998 and the population census in 2008 is 22 per cent and 24 per cent, respectively.

Figure 4: Share of the manufacturing sector



Source: authors' calculations based on CSESs in 1993, 1996, 1997, 1999, 2004, 2008, 2009, and 2010 and Labour Force Surveys in 2000 and 2001 from NIS[6].

3.4 Age of firms

The oldest possible establishments in Cambodia are those that were established in 1979 after the Khmer Rouge regime. About 55 per cent of industrial establishments have operated for five years or less. The proportion by sub-sectors is illustrated in Table 15.

As illustrated in Table 16, the age of industrial firms represented in ICS2003 is similar to that of EC2011 from which we exclude micro establishments to be comparable. In 2003, 43.6 per cent of industrial firms had been established for five years or less, compared to 52.40 per cent in EC2011. The share of establishments which survived more than 20 years in EC2011 is 8.63 per cent which is higher than the 1.16 per cent of firms in ICS2003. This is not surprising given the eight year difference between the two periods.

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6 This estimate of employment is based on short-term employment by asking respondents about the type of employment they were engaged in within last week.

Table 15: Number of establishments by sub-sector and age group, 2011

	All	0–5 years	6–10 years	11–20 years	20+ years
Mining & quarrying	177	97	26	33	21
Food, beverage and tobacco	31,891	17,384	6,667	5,613	2,227
Textile, wearing apparel and footwear	24,872	14,207	3,826	3,881	2,958
Wood, paper and printing	2,250	944	313	465	528
Chemical and medicines	155	82	30	33	10
Rubber, plastic, cement, metals and casting	2,867	1,411	555	581	320
Machinery components assemblies	4,684	2,673	797	787	427
Vehicle assemblies	101	51	23	19	8
Furniture and handicraft	2,993	1,590	588	648	167
Repairs	924	560	152	159	53
Electricity, water and waste collection	5,049	3,063	943	841	202
Construction	187	101	36	41	9
Total	76,150	42,163	13,956	13,101	6,930

Source: authors' calculations based on EC2011 from NIS.

Table 16: Age of firms, in %

	Employment 5 or more		All
	ICS2003	EC2011	EC2011
0–5 years	43.6	52.40	55.37
6–10 years	34.3	18.74	18.33
11–20 years	20.93	20.24	17.20
20+ years	1.16	8.63	9.10
Total sample	177	6943	76,150

Source: authors' calculations based on ICS2003 and EC2011 from NIS.

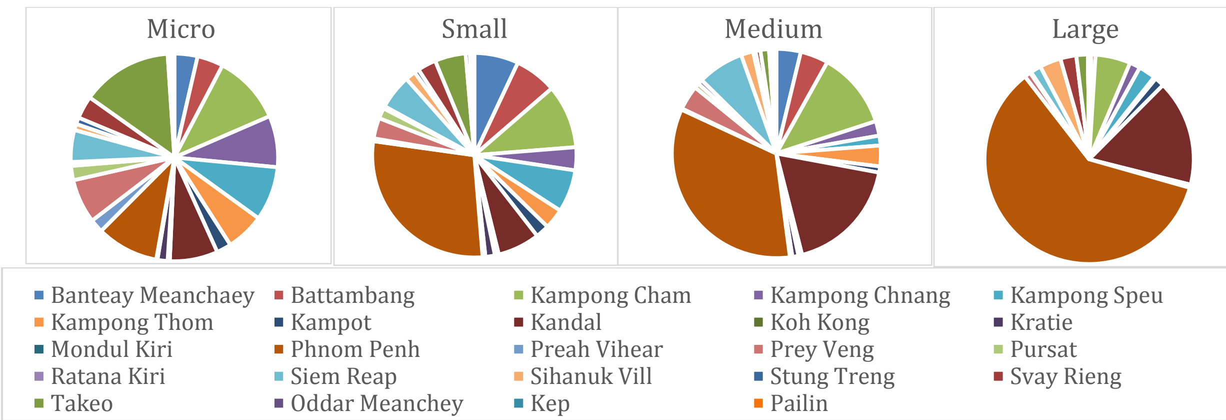
3.5 Spatial distribution

Phnom Penh, Takeo, and Kampong Cham have the most industrial establishments of all provinces. Takeo, however, is dominated by micro establishments. The number of establishments correlates with the provincial population density. The provinces with low population density, such as Mondolkiri, Kratie, Ratanakiri and Stung Treng, have the fewest establishments. Kampong Cham Province has a medium level of industrial development. It has a large fertile area of rubber and other crop plantations and the Mekong River flows through it. It is located 156 kilometers northeast of Phnom Penh.

The spatial distribution by firm size is presented in Figure 5 and shows that larger firms tend to locate in Phnom Penh and Kandal which circles Phnom Penh. Phnom Penh is a cluster for industrial establishments of all sizes. This is likely due to the availability of infrastructure including road, electricity, water supply, qualified human resources and better access to public services, which make Phnom Penh and its surrounding provinces more favourable places to locate.

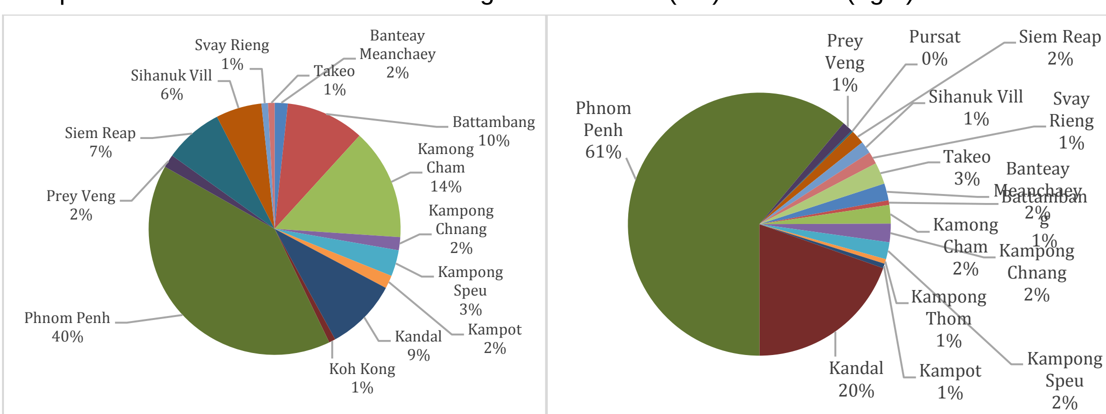
Considering the two most important sub-sectors, FBT and TWF, Figure 6 reveals that 40 per cent of establishments of medium and large FBT establishments are in Phnom Penh. The next three provinces of importance are, Kampong Cham, Battambang, and Kandal which have a share of 14, 10, and 9 per cent, respectively. Kampong Cham is rich with tobacco and rice millers while Battambang is a rice basket of Cambodia. Kandal circles Phnom Penh and benefits from its proximity to Phnom Penh. It is also a province that is rich with fish. It is likely that the location of establishments in the FBT sub-sector is dependent on the availability of agricultural inputs in the respective province.

Figure 5: Provincial spatial distribution of firms in the manufacturing sector by firm size



Source: authors' calculations based on EC2011 from NIS.

Figure 6: Spatial distribution of medium and large firms in FBT (left) and TWF (right)



Source: authors' calculations based on EC2011 from NIS.

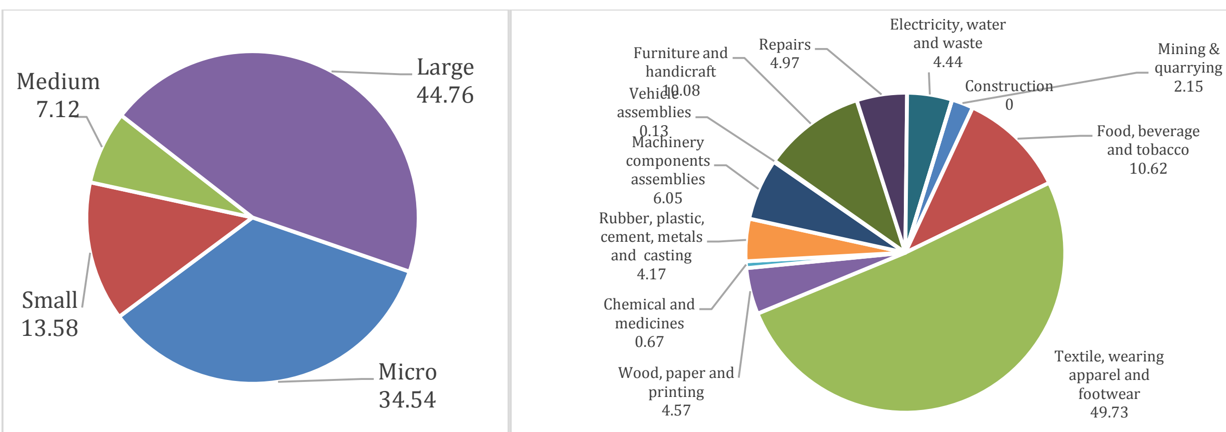
61 percent of the medium and large TWF establishments are in Phnom Penh, and 20 per cent of them are in Kandal. This sector is relatively new to Cambodia. As a result establishments have decided not to locate far from Phnom Penh. This may be due to a number of factors. First, during the early establishment of these factories in 1994, security was an issue in Cambodia and Phnom Penh was considered the safest place to locate. Second, infrastructure was in bad condition in other parts of the country. Third, electricity was only available in Phnom Penh. Fourth, public service was mainly available in the capital city. There has been some increase in the location of firms in provinces that are close to Phnom Penh including Kandal, Kampong Speu, and Kampong Chnang. It should be noted that Svay Rieng, Sihanoukville and Koh Kong are new production

bases for medium and large establishments due to the establishments of special economic zones in these provinces. These provinces are located along land and sea borders which facilitates exporting.

3.6 Ownership

The ownership structure of industrial establishments in Cambodia varies by size of establishment and sub-sector as revealed in Figure 7. Figure 8 disaggregates ownership by nationality for FBT and TWF. Almost all micro and small industrial establishments are owned by Cambodians while only 37 per cent of large industrial establishments are. This is compared with 47 per cent owned by Chinese and 12.5 per cent owned by Korean and other Asian nationalities. Only 13.5 per cent of employees of micro establishments are under foreign ownership while 44.76 per cent of employment of large establishment are under foreign ownership. Cambodians own about 90 per cent of medium and large industrial establishments for FTB but only 41 per cent of TWF establishments which is dominated by Chinese (48 per cent). This suggests that Cambodian ownership remains strong in traditional sectors, but does not have enough vigor to jump into new industries. In the TWF sub-sector, FDI from China has contributed significantly to growth of the sector.

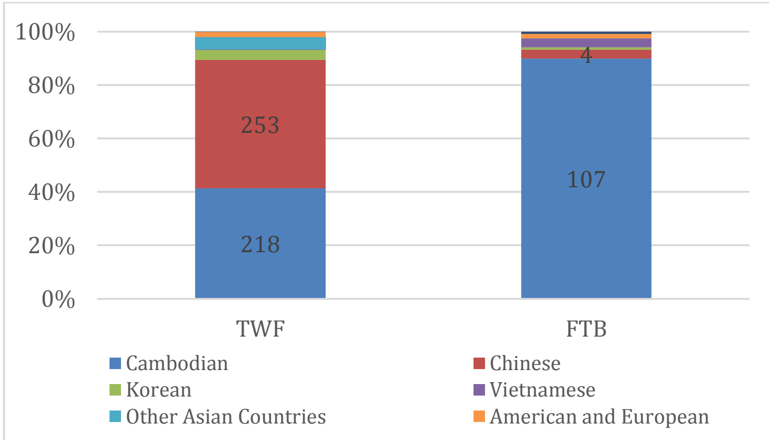
Figure 7: Foreign ownership by size and industrial type



Source: authors' calculations based on EC2011 from NIS.

By age of firm, more than 62.5 per cent of foreign firms were established within five years. There are only 21 foreign firms that have been established longer than twenty years. Among them, seven are in machinery component assembly, five in FBT and three are in TWA. Most foreign firms are located in Phnom Penh and its surrounding areas.

Figure 8: Ownership of medium and large industrial establishments in TWF and FTB by nationality



Source: authors' calculations based on EC2011 from NIS.

3.7 Sunset and sunrise industries

According to the World Bank (2009: 18), forestry and fisheries sectors accounted for 19 per cent of GDP growth in 1993–98 but only 2 per cent in 2003–08. Forest production accounted for 43 per cent of exports in 1994 and less than 1 per cent in 2006. Out of concern for the rapid degradation of forest resources and fish stocks, the government banned logging in 2000 and reformed large commercial fishing lots in 2002. The concept of community approach to forestry and fishing has been promoted since then. These two sectors which thrived in the 1990s became sunset industries in the 2000s.

As these sectors have declined in importance there are many sectors that are expected to grow in the coming years. Of these, the most significant are expected to be tourism, garments, banking, rice processing, and rubber processing.

The tourism sector in Cambodia has been growing at a steady and exponential rate in the last decade and has become the second largest income source for the Cambodian economy, after the garment sector (Kim and Tong 2010). The development of this sector is mainly driven by political stability, World Heritage monuments, especially Angkor Wat, improved tourism infrastructure, close proximity to tourism hubs, and the government's policies on tourism, most notably the *Open Sky Policy*. The number of international tourists has gradually increased from less than 118,183 in 1993 to over three million in 2012. This is expected to reach over four million in 2013 (Ministry of Tourism 2012).

The garment sector has also experienced significant growth in the last number of years as has been illustrated by the growth of the TWF sector documented in the analysis presented above. Accoding to the Garment Manufacturing Association in Cambodia (2011), the number of garment factories in Cambodia increased from just seven in 1994 to about 300 employing 314,784 workers in 2011. It is worth noting that Cambodia has not yet reaped the full benefits from growth in this sector since inputs are mostly imported from other countries and the most activities involve merely cutting and making yarns and fabrics into finished products where value added and profit margins are relatively low. Domestic supply of such inputs would not only result in more jobs and value addition for the economy but would also help make Cambodian garment products more competitive. According to Economic Institute of Cambodia (2009), the garment factories in Cambodia focused on ‘cut, make, and trim’—the lowest end of the garment value chain—while most of the new materials and accessories are imported from China, Hong Kong, and Taiwan. However, the garment sector has contributed to employment generation for young female workers from rural areas, in particular. Based on a few examples from small sample surveys of garment workers, more than 90 per cent of garment workers remit home with the average annual amount ranging from US$246 in 2007 (Cambodia Development Resource Institute 2007) to US$508 in 2009 (Luch 2009). The amount of remittances is 29 per cent of salaries earned in 2007 (CDRI 2007) and 40 per cent of the salaries in 2009 (Yagura 2011). In Luch (2009), the amount of remittances from garment workers is estimated at 33 per cent and 44 per cent of household income in 2007 and 2009, respectively. 40 percent of remittances are used for food consumption and 20 per cent for the purchase of productive assets (CDRI 2007). It is clear that while the sector has not benefited the economy to the extent that it could, it plays an important role in employment generation and the well-being of the rural poor throughout Cambodia.

Up to 2005 Cambodia’s financial system was very underdeveloped compared with other countries at a comparable stage of development. The commercial banking sector has since caught up. Due to Cambodia’s relatively small GDP, commercial banking remains small in absolute terms. Lending by commercial banks and micro-finance institutes (MFIs) has risen even faster. Access to credit has increased and a few banks have expanded their branches, automatic teller machine, and consumer credit substantially. A larger number of banks have expanded credit for real estate development and construction. Development has been disrupted by the world financial crisis but commercial loans have begun to gradually grow again. According to National Bank of Cambodia (NBC) (2011: 17), there are 29 commercial banks, six specialized banks, two foreign-subsidiary offices, and 27 MFIs (of which six take deposits), and 28 rural credit operators in Cambodia.

While the role of the banking sector in promoting growth remains small, and most of the growth achieved to date has been without bank finance (growth in credit has been largely directed to consumption, working capital, and real estate, see World Bank 2009: 14), there are signs that this sector will grow in the future. For example, as land titles are issued to farmers, it is expected that loans to farmers will increase dramatically as they can be used as conventional collateral. According to NBC (2010), solvency ratios were on average 31.4 per cent (NBC’s regulation requires that the solvency ratio is greater than 15 per cent of net worth); non-performing loans decreased from 6 per cent to 3 per cent between 2009 and 2010; and the liquidity ratio remained stable at 90.6 per cent. Total loans and advances to customers grew by 26.7 per cent while the number of borrowers increased by 7.5 per cent. The total amounts of deposits increased by 26.3 per cent while the number of depositors increased by 12.2 per cent from 968,472 to 1,067,404 depositors. Finally, the number of ATMs increased 35 per cent from 371 to 501 terminals nationwide.

Rice production and processing has benefitted from trade preferences given by the EU to rice exported from Cambodia. In addition, the government further supported rice exports through the introduction of the (milled) rice export policy in 2010 to support the rice-processing industry which has a large paddy surplus but low rice exports. The official rice export figure in 2009 was only 15,500 tons with paddy production of 7,586,000 tons (Committee for Economic and Financial Policy 2011). This policy will bring benefits such as the promotion of local rice milling, employment, and other value added activities from the rice value chain. This government policy is the first to be purely written by the Cambodian administration. The experience of the rice export policy will be used as a model for other potential crops, notably rubber processing.

Land for rubber plantation and productivity have been increased due to increases in the world demand for rubber. Importantly, Cambodia still has potential for an expansion in the amount of land used for rubber plantation and up to now Cambodia has mainly exported raw rubber. Rubber processing will be the most likely industry to be targeted by the government to follow the model of rice export promotion. The total land area cultivated for rubber was 170,000 ha throughout the country in 2010 (Hang 2010). Exports of rubber reached 40,583 tons in 2011 compared to 26,460 tons during the same period in 2010. The rubber is mainly exported to China, Vietnam, and Malaysia.[7] The cultivated land for rubber plantation was 181,454 ha in 2011.[8] The overall available acreage suitable for cultivation of rubber trees is estimated to be up to 350,000 ha and this potential cultivated area will be expended further because some places which were not previously considered as ideal for rubber production became suitable for rubber production. These developments suggest that rubber processing will also be one of the sunrise industries in Cambodia.

Table 17 compares the share of export and value added across the various sunset and sunrise industries highlighted above. Based on export performance, the share of textiles in total exports increased in the period of 2000–04 and 2005–07, but declined in the 2008–10 period. In the latest period, Vegetable products, rubbers and food stuffs are rising in importance, primarily due to the Everything but Arms (EBA) scheme that allows Cambodia to export agricultural goods to Europe tariff-free. Footwear/headgear was also rising both in the 2005–06 and 2008–10 periods.

Export of raw hides, skins, leather, and furs, animal and animal products, plastics/rubbers and wood and woods products are low performing sectors as measured by the reduction in their share of total exports between 2000 and 2004. The export share of animal and animal products and wood and wood products continued to drop during 2005–07. During 2008–10, textiles, metals and stone/glass have also seen their share decline. The financial crisis hit the export of garments strongly, particularly in 2009.

Overall, based on export performance between 2000 and 2010, textiles and footwear are among the rising industries, while wood and wood products and animal and animal products are those in the sunset industries.

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[7] OSK, Cambodia investment research daily news, dated on 22 December 2011.

[8] Based on http://businessnewscambodia.com/2011/08/rubber-prices-increasing/

Table 17: Export performance

	2000–04	2005–07	2008–10
Sunrise (average share growth rate >0.05%)	Textiles (HS[9] 50–63) Stone / glass (HS68–71) Machinery / electrical (HS 84–85)	Textiles Footwear / headgear Stone / glass Metals (HS 72–83)	Footwear / headgear vegetable products (HS06–15) Plastics / rubbers Food stuffs (HS 16–24)
Sunset (Average share growth rate <0%)	Raw Hides, skins, leather, & furs (HS 41–43) Animal & animal products (HS01–05) Footwear / headgear (HS64–67) Plastics / rubbers (HS 39–49) Wood & wood products (HS 44–49)	Animal & animal products wood & wood products (HS 44–49)	Metals stone / glass textiles

Source: authors' calculations based on yearly export statistics from the General Department of Customs and the Excise of Cambodia, the Ministry of Economy and Finance.

Table 18 performs a similar analysis using contribution to value added to classify sunrise and sunset industries. Since 1993, five sectors have experienced an increasing share of value added including TWF, wood, paper and publishing, rubber manufacturing and electricity, gas and water (EGW). This reflects Cambodia's natural endowment of forests and rubber plantations and the need for investment in EGW infrastructure, which had been destroyed by the civil war, such as, for example, government investment in the construction of a hydro-dam and a national grid to address power shortages and meet high future demand.

During the period 1998–2004, when full peace was achieved, TWF and mining and construction were among those sectors that gained a larger share. Construction continued to boom until 2007, before the world financial crisis hit in 2008. Rubber processing declined between 1998 and 2007. As discussed above, rubber processing is expected to increase in importance in the coming years. FTB was in decline between 1993 and 2007. After global food prices soared in 2008, this industry gained momentum. Rice production and exports will also help boost this sector in the coming years. The mining sector has been gaining share since 1998. Since 2007, licenses on exploration of oil and gas in the Gulf of Thailand have been issued. This sector could continue to grow in the future.

The five industries have been in decline in terms of share of value added are mining, FBT, non-metallic manufacturing, basic metal and metal products, and construction. The decline of these sectors is for the most part due to market liberalization forcing domestic goods to compete directly with imported goods that have more varieties and are of a better quality.

9 HS, the harmonized commodity description and coding system, is an internationally standardized system of names and numbers for classifying traded products developed and maintained by the World Custom Organization.

Table 18: Average growth of value added

	1993–97	1998–2004	2005–07	2008–present
Sunrise (average share growth rate >0.05%)	Textile, wearing apparel & footwear Wood, paper & publishing Rubber manufacturing Electricity, gas & water	Textile, wearing apparel & footwear Mining Construction	Mining Textile, wearing apparel & footwear Non-metallic manufacturing Construction	Mining Textile, wearing apparel & footwear Food, beverages & tobacco Non-metallic manufacturing Electricity, gas & water
Sunset (average share growth rate <-0.05%)	Mining Food, beverages & tobacco Non-metallic manufacturing Basic metal and metal products Construction	Food, beverages & tobacco Wood, paper & publishing Rubber manufacturing	Food, beverages & tobacco Rubber manufacturing Wood, paper & publishing	Wood, paper & publishing Construction

Source*:* authors' calculation based on database of the National Account from NIS.

4 Industrial policy

Cambodia has one of the fast growing populations in the world. Between the census of 1998 and 2008 the population increased from 11.4 million to 13.4 million, an average annual increase of 1.5 per cent. Based on author's calculation using NIS (2011), it is projected that the labour force will increase by 213,000 per annum between 2010 and 2013. The economy will come under pressure to generate productive employment opportunities for this very large number of young labour force entrants. Much of the policies of recent years have been focused on addressing these needs.

4.1 Industrial policy

The Industrial Development Action Plan (1998–2003) laid down two goals: the development of export-oriented industries and the development of import-substituting production of selected consumer goods. These goals were to be achieved by promoting the development of: (i) labour-intensive industries; (ii) natural resource-based industries; (iii) SMEs; (iv) agro-industries; (v) technology transfer and upgrading the quality of industrial products; (vi) the establishment of industrial zones; and (vii) the development of import-substituting production of selected consumer goods.

In the last five years, the development of labour-intensive manufacturing has focused on the textile and garment sub-sector. The government has continued to provide support for broad-based industrial development by: (i) encouraging the expansion of SMEs; (ii) improving the performance of state-owned enterprises through corporatization and privatization; (iii) stemming the flow of illegally imported products; (iv) reducing barriers to export such as export taxes; (v) reducing barriers to the import of business inputs; (vi) enhancing the linkage between SMEs and between SMEs and large industries; (vii) promoting a national productivity centre to help small and medium size firms increase productivity and reduce production costs; (viii) establishing a National Institute of Standards to ensure quality of products; (ix) establishing a National Laboratory with the technical capacity to undertake physical, chemical, microbiological, and mechanical analyses of products; (x) establishing an industrial property rights bureau; (xi) promoting vocational training in Cambodia and overseas; and (xii) upgrading the legal framework in the areas of factory law, industrial zone law, patent and industrial design law, weights and measurement, and industrial safety.

As such, at the core of Cambodia's industrial policy is a policy to focus more resources on and provide more incentives to attract investment into its industrial and agricultural sectors where Cambodia has comparative advantages for export promotion, and a policy to focus on the development of physical infrastructure and the production of basic necessities and utilities to cater for domestic needs instead of relying completely on imports.

Cambodia's industrial policy is built upon seven main points:

1 Developing labour-intensive industries, such as garments, toys and footwear;
2 Promoting the development of agribusiness by strengthening the legal framework for longer-term land management and providing incentives to establish agro-processing factories; 3) Developing industries which are based on the use of basic natural resources, mainly by processing the existing natural resources within-country such as fish, meat, and cement production;
3 Promoting SMEs, micro-enterprises and handicrafts by providing micro-finance, marketing services and training, and supplying information on sectoral development;
4 Encouraging technology transfer and export product diversification by promoting the assembly of electrical appliances and electronics products and improving product quality;
5 Establishing industrial and export processing zones by developing infrastructure and improving service quality;
6 Increasing the production of goods for import substitution, such as the production of fertilizers, as well as daily consumption goods such as soap, paint, electrical appliances, and agricultural inputs.

4.2 Macroeconomic policy

The deficit during 1990–92 was financed by a central bank credit, generating escalating rates of inflation and currency depreciation. This in turn contributed to a lack of public confidence in the national currency and high level of dollarization. In late 1992, a reform programme was instituted, designed to increase budget revenues, contain expenditure, and reduce monetary expansion.

In a largely dollarized economy, macroeconomic policy in Cambodia relies mainly on a conservative fiscal policy to prevent inflationary pressures. Monetary policy has allowed a deepening of the financial sector, although up until mid-2007 at a pace consistent with macroeconomic stability. Current and capital accounts are open and there is no restriction on the exchange rate. Most sectors of the economy are liberalized (World Bank 2009).

NBC was not using direct monetary instruments: interest rates were completely liberalized and there were no quantitative restrictions on bank lending. Given the lack of instruments, the monetary authorities used foreign exchange interventions to regulate riel liquidity and to smooth fluctuations in the exchange rate.

In the National Strategic Development Plan (NSDP) updated (2009–03), due to uncertainty caused by the global financial and economic crisis, the government took immediate steps that have included: a sizable fiscal stimulus and sharper focus on support for social safety net programmes delivered by ministries and agencies to mitigate the adverse effects of the crisis on the vulnerable and poor segments of the population. On the monetary side, NBC's rapid response included a dramatic easing of an accommodative monetary policy and implementing wide-ranging measures to support and strengthen the financing and banking sector.

In NSDP updated (2009–03), in the medium- to long-term, the NBC will continue to: (i) maintain price stability with an inflation target of under 5 per cent; (ii) ensure the continued soundness of the financial sector by responding in a pro-active manner to emerging internal and external developments; (iii) continue to manage a floating exchange rate regime with a target of around KHR4,100 per US$; and (iv) maintain foreign reserves to finance at least three months of imports. International reserves have been increased from US$500 million in 2000 (Hang 2010) to US$3 billion by the end of 2011 (Chea 2013).

Cambodia has emerged from the global recession quite strongly and is now on the road of recovery. Economic growth is accelerating, inflation is under control, the exchange rate remains broadly stable and international reserves continue to accumulate. More than a decade of structural reform, a sound and stable financial system and well-timed and well-targeted policy stimulus have provided crucial support for the Cambodian economy.

In order to strengthen macroeconomic stability, in the retagular strategy phase III, the government will focus on the following priorities: to further implement a flexible, co-ordinated and cross-cutting fiscal policy to be consistent with monetary policy; to diversify the export base of the Cambodian economy to align with regional and global demand; to increase 'fiscal space' and keep public debt at a manageable level; to strengthen institutional co-ordination of crisis prevention and resolution mechanism, enhancing private sector development; to promote labour market development; to encourage investment in key sectors, ensuring an increase in international reserves; to continue to implement a managed float exchange rate regime to maintain stability of the riel and strengthen public and investor confidence of the local currency to promote its greater use and reduce the high level of dollarization; to strengthen supervision and management of liquidity, credit, and market risks in compliance with international standards (Royal Government of Cambodia 2013).

4.3 Trade policies

Economic reintegration has been an important objective of the government and it has been fundamental to its growth vision for the country. The domestic market has been, and will remain for the foreseeable future, too small to support the kind and rate of long-term growth envisaged, and it needs to attract export-oriented investment. Cambodia has the potential to capitalize on the intra-regional complementarity that stems from differences in labour costs and availability of natural resource endowments and trading regulations.

Cambodia joined ASEAN in 1999 and the WTO in 2003. This marked the final step in bringing Cambodia back into the major regional and international organizations that govern international economic relations. For the garment industry the accession presented not only a challenge to become more competitive in regional and global markets but also opportunities for expansion because of the removal of the quotas for Cambodian exports to 147 WTO members based on most-favoured nation principles and non-discriminatory practices.

4.4 The institutional and regulatory framework

The government of Cambodia regards the private sector as the main impetus for the country's economic growth and has mainstreamed it in key strategic development plans. In order to empower and allow the private sector to participate in planning and managing the economy more effectively and efficiently, the government, initiated the Government-Private Sector Forum (G-PSF)[10]. The Council of the Development of Cambodia (CDC) also established a one-stop-service mechanism to facilitate investment applications and decisions. The length of investment application procedures was reduced to a maximum of 45 days. This law provides a clear and more liberal investment regime with attractive incentives for FDI in Cambodia for projects in high technology industries, export-oriented activities, tourism, agro-processing industries, physical infrastructure and energy, provincial and rural development, environmental protection, and investments made within a special promotion zone.

According to CDC (2012: III1-2), to improve the business and investment climate and to comply with WTO regulations, the Royal Government of Cambodia has been putting emphasis on updating laws and regulations and adopting new laws and regulations on investment, trade, and business. Law on the Implementation of the Civil Code (2011), Anti-Curruption Law (2010), Criminal Code (2009), Civil Code (2007), Law on Criminal Procedure (2007), Law on Education (2007), Law on the System of Units (2009), Law on Tourism (2009), Law on Insolvency (2007), Law on Standards (2007), Law on Secured Transaction (2007), Law on Customs (2007), Law on the Approval of the Agreement on Investment of the Framework Agreement on Comprehensive Economic Cooperation between the ASEAN and China (2010), Law Adopting the Agreement on the ASEAN Comprehensive Investment Agreement (2009), Law Adopting the Agreement on Comprehensive Economic Partnership among ASEAN and Japan (2009), Law on the Adoption of the Agreement between Cambodia and Vietnam on Waterway Transportation (2010), Law on Civil Aviation of the Kingdom of Cambodia (2008), Law on Providing Foreigners with Ownership Rights in Private Units of Co-Owned Buildings (2010), Law on Expropriation (2010), Law on Concession (2009), Law on Water Resource Management (2007), Law on Financial

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[10] G-PSF meets twice a year under the chairmanship of the Prime Minister and has eight working groups meeting regularly, provides a vehicle for private sectors to raise its concerns and for the government to be held accountable for its decision by the private sector and it is also used for consultation on legislation. In 2012, G-PSF added another working group to promote the export of agro-processing products. This forum is viewed by investors as an important device for creating a sense of security for their investments (World Bank 2009: 21). Since this forum has the status of cabinet meetings, decisions made by the Prime Ministers are binding (Ibid.: 93).

Lease (2009), Law on the Issuance and Trading of Non-Government Securities (2007), Law on Combating Money Laundering and Terrorist Financing (2007), Law on State Securities/Bond (2007), Law on Protection and the Promotion of the Rights of Persons with Disabilities (2009), Law on the Amendment to Articles 139 and 144 of the Labor Law (2007) are only selected laws enacted between 2007 and 2011which does not include regulations below law that do not require the adotption by the national assembly.

4.5 Labour market policies

Cambodia’s labour market remains free and open in practice, though labour laws have been in place since 1992. The emergence of the garment sector led to new labour laws in 1997, which focused on freedom, the establishment of unions, and rights for demonstration. The 1997 law is only applied to the garment and its related sectors.

A key feature is that of minimum wages which are set out in Table 19. The legal minimum wage in Cambodian factories was US$45 per month in 1997 for regular employees. It took 13 years to raise the wage nominally by 36 per cent, or less than 3 per cent per year, which was slower than the average inflation rate of 5.3 per cent per annum during the same period. In other words, minimum wage has been declining in real term. There were a total of 579 strikes between 2003 and 2011, which was roughly more than a strike every week. The main issue was the minimum wage.

Table 19: Evolution of Cambodian minimum wage, in US$

	1997	2000	2006	2010
Apprentices	30	30	30	30
During probation	40	40	45	56
Regular employees	45	45	50	61

Source: based on Chea (2011).

The *better factory* programme was introduced in 2010. The basic objective of the program is to improve working conditions in Cambodia’s textile and apparel sector, particularly through an independent monitoring system of working conditions in garment factories. This programme results from US-Cambodia trade negotiations to improve working conditions in exchange for market access in the USA. There were 34 factories under monitoring initially and this increased to registered 400 factories in 2013.

4.6 Sector specific policies

Cambodia has already experienced many variants of industrial policy. Most exports have received support from targeted government policies. There were negotiations of higher quotas for garments, *Open Skies Policies* and other infrastructure policies for tourism, and SEZ policies for a few assembly factories. However, very little assessment of the effectiveness of these policies has been undertaken. The World Bank (2009: 88) provided a rapid review of the existing industrial policy instruments. The policies reviewed included export quotas, labour standards, tax holidays, exemption of import duties, and VAT for imported inputs used for manufactured exports, investment promotion, export promotion, SEZs, the Export Market Access Fund, G-PSF, value chain interventions, and economic land concessions. They found that most instruments lacked accountability with the only exceptions being those tested by the market through exports. Instruments also lack co-ordination. Moreover, several instruments were found to either lack incentives or to be poorly targeted (i.e. tax holidays cover a broad range of sectors).

The rice export policy set in 2010 was a response to the critique of a lack of co-ordination when issues cut across many ministries. The Cambodian government set the goal to export 1,000,000 tons of *milled* rice by 2015 with clear responsibility assigned to each government institution concerned and a clear time line for the annual achievement of this goal.

Rice processing is now designated as one of the emerging growth sectors in Cambodia with government commitment to evade *poor governance* experienced in relation to other sectors of the economy in the past.[11] The government has opted for sector-specific governance arrangements in the short-run, while accepting that good overall governance is a necessary condition for long-term economic growth. Whether these arrangements are capable of being scaled up beyond a few strategic growth sectors under less favourable external environments remain to be seen.[12] Here we illustrate three other sector-specific policies that have been laid down by the government.

Garment sector

The garment sector is now one of country's fastest-growing sectors for private investment and by far leads the country's exports. Robust growth in the garment sector is mainly the result of normalized trade relationship (NTR) agreements, first signed with the European Union (EU) in 1996 and then signed with the USA in 1997. The agreements were the result of Cambodia's being granted most favoured nation (MFN) status and status under the generalized system preference (GSP) agreement. Between 1994 and 1999, Cambodia's garment exports grew by more than 100 per cent, from US$495 million to U$1,102 million, with about 90 per cent of garment shipments going to the USA. This strong performance prompted the USA to introduce quotas on 12 categories of Cambodian garment exports in 1999, but fortunately this measure has not significantly affected the expansion of the industry, whose exports continued to rise to nearly US$3,000 million in 2008 (Chan and Oum 2010).

Rapid development in the garment industry, combined with the country's democratization process, has resulted in the rapid growth of unions. However, inexperience on the part of both labourers and management, misunderstandings between Cambodian workers and foreign managers, and lack of adherence to labour laws by some employers, has led to labour conflicts. In 1998, the Clinton administration developed the US-Cambodian Trade Agreement on Textiles and

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[11] Corruption in 2008 is still the largest concern for constraints in business environment in Cambodia (World Bank 2009). Cambodia in 2011 ranks 164 among 182 countries in the Corruption Perceptions Index by *Transparency International* which increased from 154 among 178 countries in 2010.

[12] Ear (2009) used a comparative study of governance between the garment and rice industry. At that time, he considered the garment sector was vibrant and the rice sector as 'might be emerging sector'. He seemed not so positive with the rice processing industry in his analysis because the rice processing industry had a weak link to the government, no international pressure, and no stake (many small-scale rice farmers), etc. But since 2010 after the declaration of the rice export target at one million tons by 2015, rice may also be considered as vibrant if the study would have been conducted in 2010.

Apparel (1999–2004) which linked market access (increasing quota) to labour standards. The International labor organization (ILO)'s Better Factories Cambodia was instituted in 2010 for independent monitoring, finding solutions, and making suggestion to management, training, advice, and information.

Tourism

The policies for tourism are based on three basic principles: (a) the development of tourism should be sustainable, anchored in Cambodia's rich cultural heritage, history, and exquisite terrain, but more importantly should contribute to poverty reduction; (b) active and creative promotion of tourism to make Cambodia a preferred tourist destination from a cultural and nature perspective; and (c) increasing the number of days tourists stay and the amount they spend in the country and diversifying their destinations (RGC 2009). From 2009 to 2013, the government of Cambodia has prioritized completing tourism plans, marketing studies and tourism campaigns, to raise regional and international awareness of Cambodia's potential tour programmes, to attract more visitors by holding several tourism events and developing high quality facilities (Kim and Tong 2010). Those plans are as follows:

- National Strategic Development of Tourism 2009–20
- National Development Plan of Tourism 2000–13
- National Eco-Tourism Strategic Policy
- Tourism Development Plan of Phnom Penh and Surrounding Areas
- Tourism Development Plan of Siem Reap and Surrounding Areas
- Tourism Development Plan of Coastal Areas (South West)
- Tourism Development Plan of the North East

Agriculture

At the governmental level, the two NSDP (2006–10) and NSDP Updated (2009–13) included a basic direction for enhancement of the agricultural sectors by: (1) improving productivity and diversification (including nutrition and rural development); (2) land reform and demining; (3) fisheries reform; and (4) forestry reform (rectangular strategy).

According to Korea International Cooperation Agency (2013), to respond to the two NSDPs respectively, Agricultural Sector Strategic Development Plan (ASDP) (2006–10) and ASDP (2009–13) were prepared to achieve the long-term vision to ensure the availability of enough and safe food for all people, and that poverty will be reduced by accelerating agricultural sector with sustainable natural resource management and conservation. The ASDPs have laid down the following specific objectives:

- To enhance national food security and agricultural productivity;
- To commercialize agriculture by increasing the ratio of sales production through expansion of market access for agricultural products;
- To strengthen instituioal system and legislations framework, and human resource development which are obstacles in achieving agricultural sector goals;
- To boost productivity through structural reform in fisheries; and
- To raise productivity through structural reform in forestry.

The Strategy for Agriculture and Water (2010–13) was jointly developed by the Ministry of Agriculture, Forestry, and Fisheries and the Ministry of Water Resources and Meterology in 2010 with the goals to contribute to poverty reduction, enhancing food security and economic growth by (1) enhancing agricultural productivity and diversification and (2) improving water resources development and management.

The European Union’s EBA initiative, which took full effect in September 2009, permitted Cambodia as a least developing country to export rice to the EU tariff-free. The government took this opportunity to build its local rice processing industry which has great potential due to the large surplus of paddy leading the government to set targets for large production and export volumes to be achieved by year 2015 (discussed above).

5 Conclusion

Cambodia has experienced record growth rates during the last decade and private enterprise is expanding at a rapid pace. All of the signs suggest that the economy of Cambodia is on the right track. Challenges remain, however, such as issues surrounding corruption and accountability, infrastructural deficits including electricity and power outages, concerns over labour standards and corporate social responsibility practices. A key risk factor for Cambodia’s economic development is its dependence on a few key sectors such as garments, agro-processing, tourism, and construction. While the policy of export-oriented FDI, most notably in the garment sector, has played a very important role in modern job creation and has contributed to the sustained high economic growth rates observed over the last two decades, the economy of Cambodia lacks diversification, depending on a few main sectors which are also vulnerable to foreign markets and investment fluctuations. There is also little evidence to suggest that export-oriented FDI firms have yielded technological spillovers or other economic linkages with the domestic economy.

The government during last decade has focused attention on local SMEs, promoting productivity and finding markets for their products. A key example is the recent rice policy introduced by the government in 2010 to tap into the opportunities offered by the EU’s EBA initiative. The aim of this policy is to boost the local rice processing industry, generate employment, and increase value added. This policy will be the model for the government to promote other agro-processing industries, most notably rubber processing industries. As the first policy to be independently adopted by the government of Cambodia its introduction also signals a desire to overcome past problems of weak governance and co-ordination difficulties, which bodes well for future economic development.

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