



United Nations
CDP
Committee for
Development Policy

Building productive capacity for LDC graduation in Bhutan

Executive summary

Productive capacity comprises the productive resources (natural, human, physical and financial), entrepreneurial and institutional capabilities, and production linkages which together determine the capacity of a country to increase production and diversify. The framework on expanding productive capacity for achieving the sustainable development goals (SDGs) developed by the CDP in 2016 emphasizes the inter-linkages between goals directly associated with productive capacity (SDGs 8 and 9)¹ and other SDGs and stresses the need for an integrated approach.

LDC graduation should be seen not as an end in itself but as a waypoint in sustainable development. Bhutan first met the graduation criteria in 2015 and will be considered by the Committee for Development Policy (CDP) for graduation in 2018. There are strong links between expanding productive capacity and progress towards graduation, although the relationship is not deterministic. Increased productive capacity for sustainable development raises production, which in turn can increase income. Building productive capacity in a way that harnesses positive synergies with social outcomes directly increases human assets, moving a country closer to graduation. Effective industrial and trade policies, supportive macroeconomic and financial policies and international support through preferential market access and other means will lead to increased exports, overall economic diversification and a better integration into the world economy. A reduction in export concentration and export instability will improve the Economic Vulnerability Index (EVI) score.

Bhutan's progress toward LDC graduation has occurred through specialization and investment in human capital. Per capita income has been rising rapidly since the 2000s, almost reaching the 'income only' threshold, a process which has been accompanied by structural transformation. The Human Assets Index (HAI) score has also rapidly improved and passed the current threshold in 2013, mainly on account of rapid improvement in child mortality and expansion of secondary education. The economy remains vulnerable, reflected in the EVI score, and there are risks associated with over-reliance on hydropower. The impact of LDC graduation via loss of LDC-specific international support measures is expected to be somewhat limited given the absence of major exports to markets in which a preference is granted to LDCs; that aid is independent of graduation; and the relatively minor remaining benefits from LDC membership.

¹ SDGs 8 is 'Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all'; SDG 9 calls to 'Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation'.

Some of the ingredients of Bhutan's success in building productive capacity include strong government vision; access to sustainable energy; attempts at economic diversification; and recent macroeconomic stabilization. Gross National Happiness (GNH) has intrinsic benefits in that economic growth is seen as a means to an end rather than an end in itself. It fits well with the approach of the SDGs. GNH means that policies are centralized and legitimized, and tailored to the national context according to the national consensus. In many LDCs, access to energy, particularly sustainable energy, is a major constraint to building productive capacity. Bhutan is fortunate to possess hydropower potential because of its location. The Government has actively promoted the industry and developed downstream linkages without unduly damaging the natural environment. Despite the increasing dominance of hydropower, there are nascent attempts at diversification, notably in services. Expansionary macroeconomic policy is important for the development of productive capacity. The economy has recently achieved macroeconomic stability following the rupee crisis.

Bhutan's ability to scale-up goods exports or to target investment in new products is limited by the binding constraints of geography, labour costs and flexibility as well as access to finance – although these constraints are not insurmountable. Access to finance is perhaps the most readily addressable binding constraint. The decline in Chinese competitiveness due to rising wages presents opportunities for some LDCs, and there appear to be possibilities in garments and light industry due to LDC trade preferences. Bhutan, however, may find it difficult to compete with larger and cheaper LDC neighbors and against regional competitors with established garment industries. The country may within eight years lose its LDC trade preferences (which are currently not utilized) as a result of graduation. Bhutanese wages are relatively high and labour somewhat inflexible, suggesting that competition on the basis of labour costs alone would prove challenging.

The government should prioritise industrial parks and SEZs, particularly with a view to attracting services industries. Whilst the agriculture sector is an important source of poverty reduction, potential exists to draw incoming investment from a wider range of countries and in new sectors which are less susceptible to the hard binding constraints facing Bhutan, particularly distance, smallness and geography. These industries include business process outsourcing, software, call centers, data warehousing and micro-work. The most convincing evidence of Bhutan's potential will come from compelling pioneer cases, which will convince more firms to follow suit. To some extent this is already happening in the case of Thimphu TechPark Private Limited, which despite initial doubts is a major success story and has shown the potential that exists in ICT services. The government should make every effort to develop one or two parks or zones as quickly as possible in order to build trust. Enhanced inter-agency and ministerial coordination would help speed the process, ideally through an investment promotion board. Nomenclature and regulations should be harmonized, with incentives put in place consistent with actual and latent comparative advantage. As industries transfer, Bhutan will become more integrated into the global market and other investors may follow. In addition, the learning-by-doing effect may lead to the emergence of local entrepreneur-led firms. Parallel to the LDC graduation process, government needs to play an active role in structural transformation, particularly to help the economy overcome first-mover and externality problems.

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Introduction

Building productive capacity is generally seen as a major challenge for least developed countries (LDCs). The issue is the first priority area in the Istanbul Programme of Action for the Least Developed Countries 2011-2020², features strongly in the Sustainable Development Goals, and is the subject of various reports by international organizations dedicated to LDCs.³ There is also international consensus around the view that LDC graduation should be seen not as an end in itself but as a waypoint in sustainable development.⁴ Productive capacity is thus a critical component of LDC graduation and successful and sustainable development.

Work on LDC graduation has already begun in Bhutan under the national UN Delivering As One programme including an inter-agency LDC graduation workshop in November 2015, the outcome of which included a report on processes and implications of graduation for Bhutan. This short briefing builds on this work by outlining the importance of productive capacity for LDC graduation, summarizing Bhutan's performance in this regard and identifying possible priorities in building sustainable productive capacity to ensure successful development after graduation. The intention is not to provide a summary of economic activity or to outline all future areas of potential, but to focus on one or two binding constraints, to rule out some possibilities and to identify promising areas of future economic activity. The briefing draws on research conducted during on productive capacity and LDC graduation conducted during 2016 for the Committee for Development Policy (CDP) of the UN Department of Economic and Social Affairs (UNDESA), and a growth identification and facilitation framework (GIFF) study commissioned by the CDP on Bhutan.⁵

Productive capacity and LDC status

The framework on expanding productive capacity for achieving the sustainable development goals (SDGs) developed by the CDP in 2016⁶ emphasizes the inter-linkages between goals directly associated with productive capacity (SDGs 8 and 9)⁷ and other SDGs and stresses the need for an integrated approach. The framework understands productive capacity as the productive resources (natural, human, physical and financial), entrepreneurial and institutional capabilities, and production linkages which together determine the capacity of a country to increase production and to diversify its economy into higher productivity sectors for faster growth and sustainable development. Enhanced productive capacity is not a stand-alone goal but rather a component of broader progress towards sustainable development. It thus fits well with Bhutan's Gross National Happiness (GNH) approach.

As the CDP defines LDCs as low income countries facing the most severe impediments to sustainable development, countries become graduation candidates if their structural impediments are becoming significantly less severe and/or income increases sufficiently. Income is measured by gross national

² United Nations Fourth International Conference on the Least Developed Countries , A/Conf.219/3/Rev.1

³ For example UNCTAD, OHRLIS and ESCAP.

⁴ UN Conference on Trade and Development (2016) 'The Least Developed Countries Report 2016: The Path to Graduation and Beyond: Making the Most of the Process', Geneva, United Nations

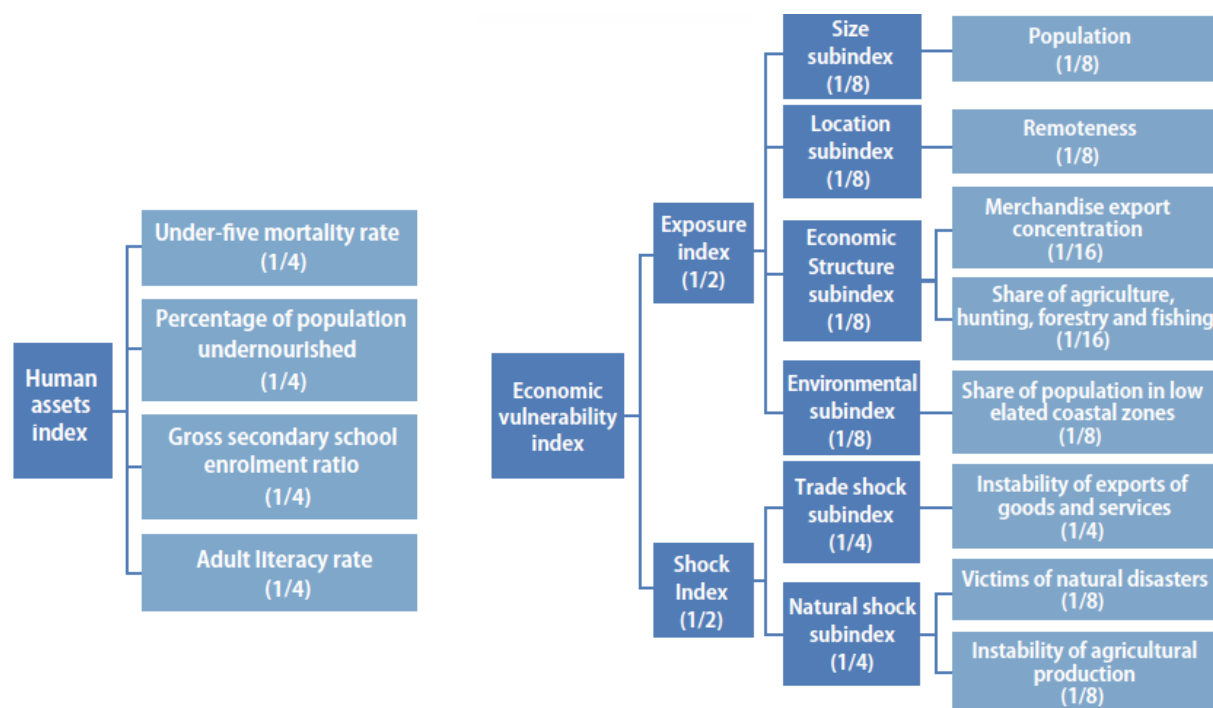
⁵ This paper was produced by the Secretariat of the Committee for Development Policy at the UN Department of Economic and Social Affairs, drawing on analysis by the Center for New Structural Economics at Peking University undertaken during 2016 using the New Structural Economics (NSE) approach. It should be taken as inspiration for policy makers rather than an exhaustive prescription.

⁶ See Report of the CDP on the eighteenth session, Official Records of the Economic and Social Council, 2016, Supplement No. 13 (E/2016/33), chapter II.

⁷ SDG 8 – Decent work and economic growth, SDG 9 – Industry, innovation and infrastructure.

income (GNI) per capita, whereas the CDP considers a low human asset base (in the human asset index) and high vulnerability to economic and environmental shocks (subsumed in the economic vulnerability index) as structural impediments. These impediments are measured through two composite indices, the human asset index (HAI) and the economic vulnerability index (EVI) shown in figure 1.

Figure 1.



Countries may be recommended for graduation by the CDP if a country passes the graduation thresholds for at least two criteria in two consecutive triennial reviews. Alternatively, a country may also be recommended if its income passes the far higher ‘income only’ threshold in two consecutive reviews, even if its human assets remain low and its vulnerability to economic and environmental shocks high.

There are strong links between expanding productive capacity and making progress towards graduation, but also notable differences. First, increased productive capacity for sustainable development leads to increased production, which in turn raises income. However, production can be increased without expanding productive capacity for sustainable development as defined by the CDP, in particular by exploiting natural resources through mining activities. Moreover, income can increase without production, for example by increasing proceeds from licenses granted to other countries to exploit natural resources.⁸

⁸ Production can also increase without raising income, for example if proceeds from productive activities are fully appropriated by foreign investors. However, this is probably most relevant in cases of natural resource exploitation that do not contribute to expanding productive capacity for sustainable development.

In addition, there are clear links between productive capacity and the other two LDC criteria. Building productive capacity in a way that harnesses positive synergies with social outcomes directly increases the human assets, moving a country closer to graduation. In principle, increased human assets may not necessarily imply higher productive capacity if these assets are not harnessed for economic activities, for example due to the lack of complementary physical capital or institutional failure. Generally, though, the link between productive capacity for sustainable development and human assets is clearly positive and two-directional.

The link between expanding productive capacity and reducing the economic vulnerability as measured by the EVI, however, is more complex. Effective industrial and trade policies, supportive macroeconomic and financial policies and international support through preferential market access and other means will lead to increased exports, overall economic diversification and a better integration into the world economy. By reducing export concentration and export instability, this will result in an improved EVI score.

Raising agricultural productivity, a key ingredient of expanding productive capacity in many LDCs, ultimately reduces economic vulnerability as the share of agriculture in GDP would decline (as labour formerly active in agriculture could move to more productive manufacturing or services sectors) and agricultural instability would fall. However, as in the case of export instability, this may be achieved only after an initial overshooting.

Generally, and after time lags, enhancing productive capacity will in most cases lead to lower EVI scores and move countries closer to graduation. However, it should be taken into account that several components of the EVI reflect structural constraints that are policy-invariant exogenous factors, at least from the perspective of an LDC. Changes in population only marginally change the EVI score (moreover, in most LDCs increasing population growth would not be seen as progress towards sustainable development); remoteness changes over time due to shifts in world trade patterns rather than trade performance of individual LDCs; and the share of people living in low elevated coastal zones reacts only slowly to changes in land planning policies such as zoning. Consequently, a large part of the EVI score is rather fixed even in the medium term. This also explains why even many non-LDCs have EVI scores above the LDC graduation threshold. This includes all four countries that already graduated from the LDC category – Botswana, Cape Verde, the Maldives and Samoa.

Bhutan's progress toward LDC graduation

Some countries have graduated from the LDC category or made progress towards graduation not through progress in all three LDC criteria but by specializing in a few economic activities while at the same time investing in human capital. Bhutan falls within this latter category given that it specializes in natural resource based activities (hydropower generation) and tourism, with some manufacturing.

In line with economic growth and significant investments in social sectors, Bhutan has made rapid progress towards graduation, as can be seen from figures 2-5 below. The country first met the graduation criteria in 2015 and will be considered by the CDP for graduation in 2018. Per capita income has been rising rapidly since the 2000s, reaching almost the 'income only' threshold. The HAI score has also rapidly improved and passed the current threshold in 2013, mainly on account of rapid improvement

in child mortality and expansion of secondary education.⁹ Generally, Bhutan’s progress in improving assets is routed in the government’s active efforts to reduce poverty and maintain equality: the promotion of universal education and the shift of workers into the cash economy has expanded the potential workforce and stimulated demand. Poverty reduction has been faster than in south Asian countries and has fallen to lower levels, whilst equality is higher than in comparable countries (the income Gini coefficient is 38.1, which is low by LDC standards). Economic vulnerability, however, remains high. While the shift of global economic activity towards Asia has reduced the remoteness score and agriculture as lost its role as dominant economic activity, the country remains vulnerable to natural disasters despite undertaking disaster risk reduction measures and export instability is high, largely because each new hydropower plant leads to a sudden increase in export earnings. Agricultural instability has actually worsened, as the increase in production over the last decade has been accompanied with higher volatility.

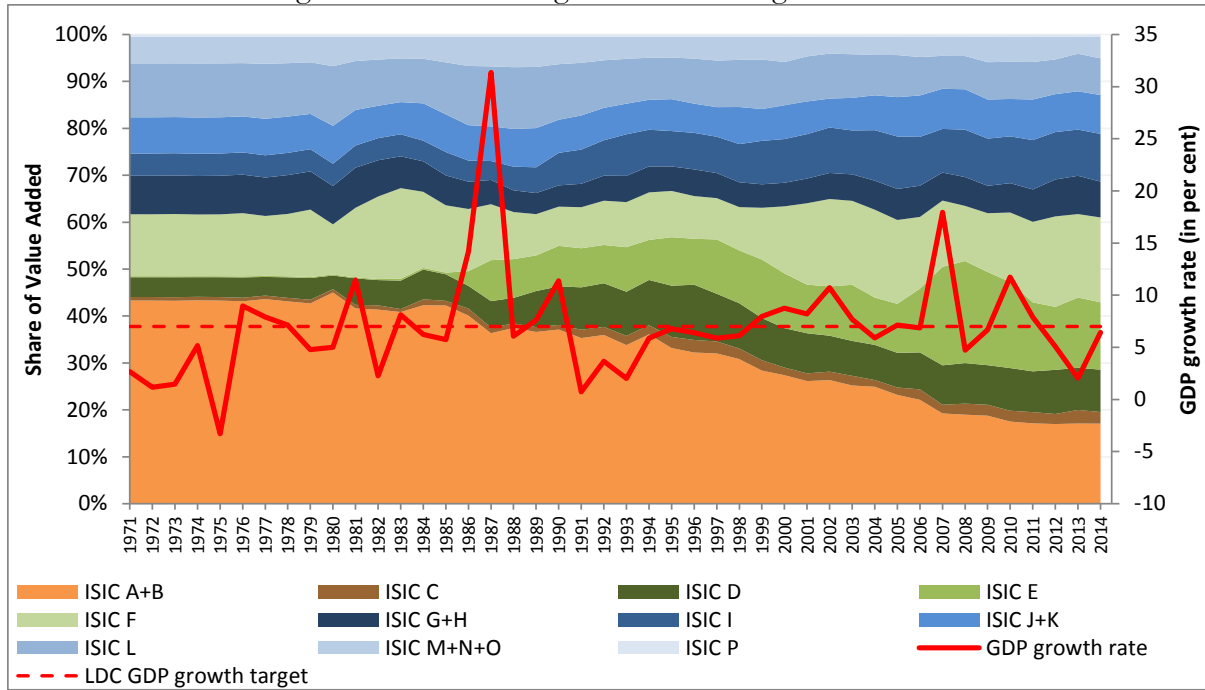
Table 1: Key indicators on LDC graduation and productive capacity

		Bhutan	LDCs - median	Developing countries - median
LDC criteria	Per capita GNI (in US Dollar)	2,277	684	3323
	HAI	67.9	52.7	84.3
	EVI	40.2	39.3	33.1
Health	Under-five mortality rate	32.9	69.0	28.1
Inequality	Access to water	100.0	75.7	91.4
	Remittances (% of GNI)	6.9	4.7	5.6
Investment	Gross fixed capital formation (% of GDP)	45.4	24.6	23.8
Agriculture	Agricultural labour productivity	972	512	1,835
Structural development	Share of mining and quarrying in GDP	2.5		
Globalisation	FDI inflows (% of GDP)	1.6		

⁹ The lack of progress in reducing undernourishment can be explained with data quality, as the only available figures are based on relatively old informal estimates.

The following chart shows that some degree of structural transformation has occurred since around 1990, with the greatest change (likely construction of hydro facilities) coinciding with episodes of rapid economic growth. The shrinking, orange section at the bottom (ISIC codes A and B) represents agriculture, forestry and fishing, plus mining and quarrying. The expanding dark green, lighter green and lightest green areas (ISIC codes D, E and F) are electricity, water supply and construction.

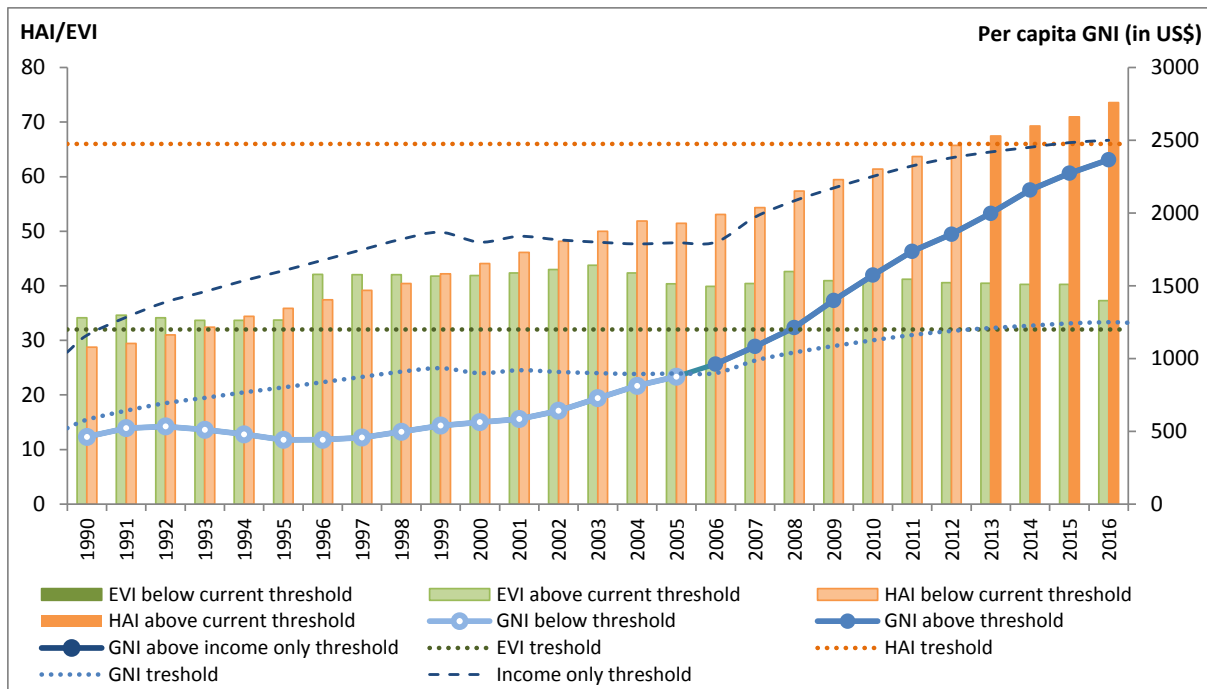
Figure 2. Sectoral change and economic growth in Bhutan



Source: CDP Secretariat based on UNSD; see annex 6 for definition of ISIC codes.

The next chart shows that GNI has been above the threshold since 2006, whilst the HAI has been above the threshold since 2013. The EVI remains below the threshold for graduation.

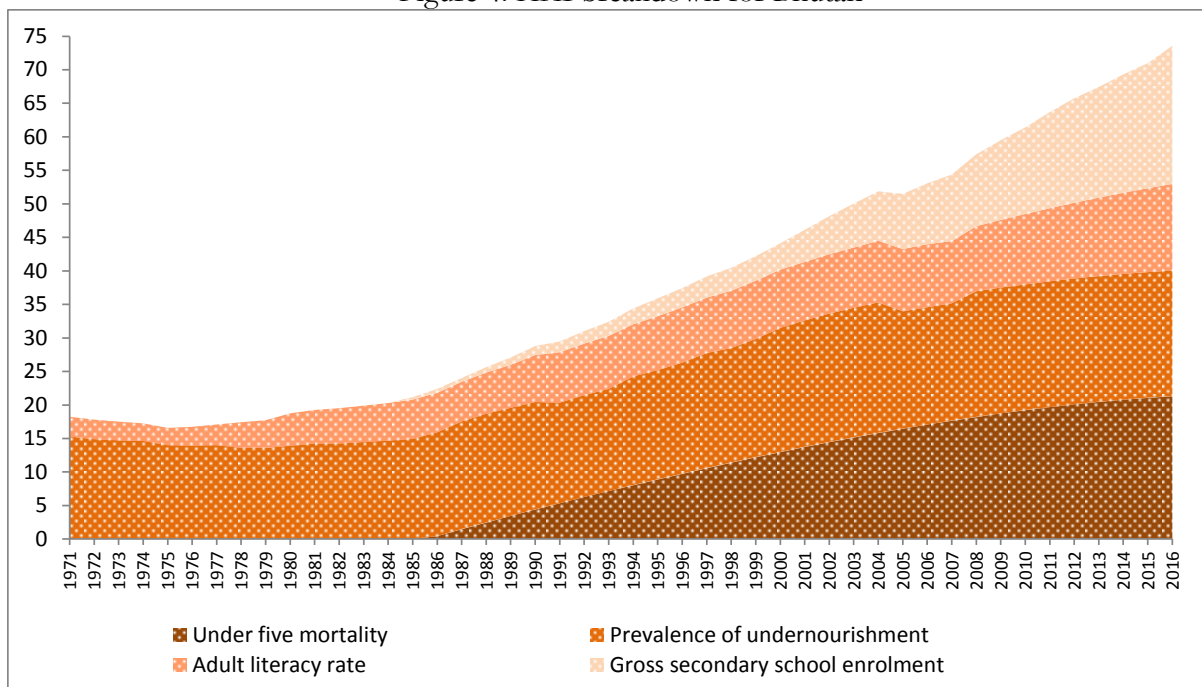
Figure 3: LDC criteria in Bhutan



Source: CDP Secretariat

A breakdown of the HAI shows among other things that Bhutan has performed well on under-five mortality, with the index improving significantly over the last 30 years. There has also been a notable improvement in gross secondary enrolment over roughly the same period.

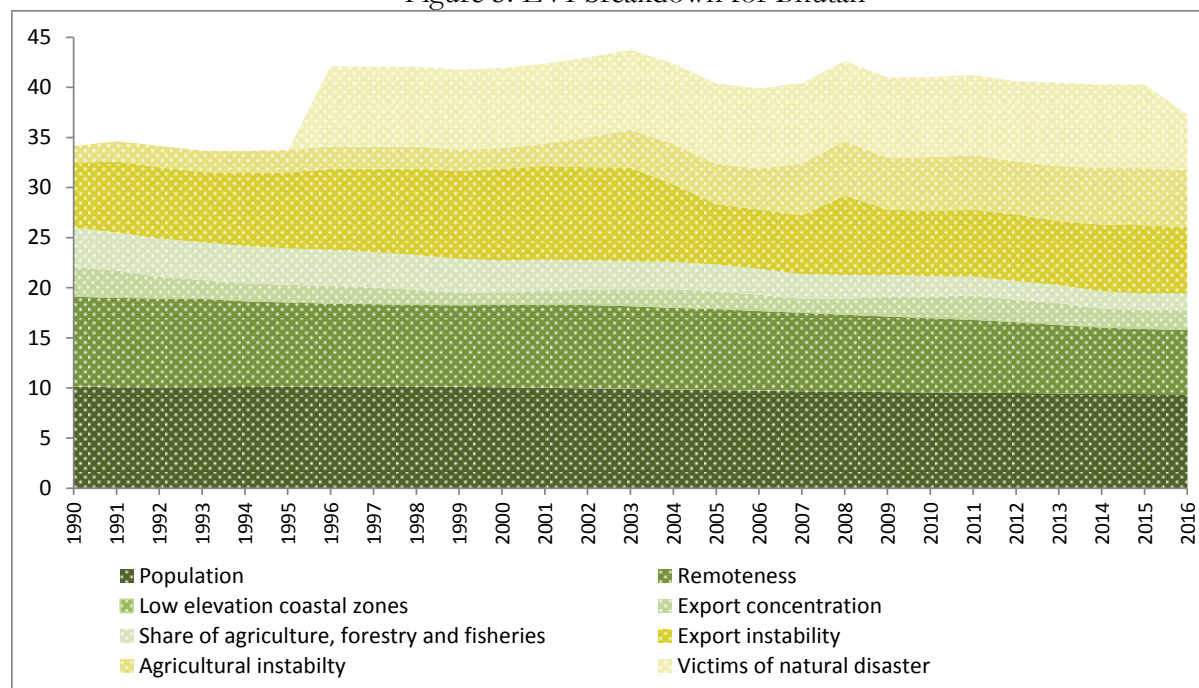
Figure 4: HAI breakdown for Bhutan



Source: CDP Secretariat

Bhutan’s vulnerability, as shown by the following chart, is broad-based although has begun to decline slightly in recent years.

Figure 5: EVI breakdown for Bhutan



Source: CDP Secretariat

What Bhutan has done well

1.1 Vision

A strong sense of national vision has played a key role in the development of productive capacity. Gross National Happiness (GNH), aims to “maximize the happiness of all Bhutanese and to enable them to achieve their full and innate potential as human beings,” advocating “a harmonious balance between the material and non-material dimensions of development”. The four main pillars of GNH are sustainable development; the preservation and promotion of cultural values; conservation of the natural environment; and good governance.

GNH has intrinsic benefits. Economic growth is seen as a means to an end rather than an end in itself, and growth is sacrificed if it harms the worst-off or damages the natural environment. This means that human development is in effect the highest priority rather than aggregate economic expansion, which is often a misleading indicator of development.

Good governance self-evidently facilitates the development of productive capacity; indeed there are few examples of LDCs which have diversified without some form of locally-adapted governance framework aimed at facilitating the broad aims of the national population. GNH means that policies are centralized and legitimized; and tailored to the national context with national consensus. In some LDCs a key obstacle to infrastructure development has been the unwillingness of some communities

to allow the building of roads and electricity networks, in part due to their perception that the central government does not represent their interests. The Bhutanese emphasis on GNH promotes a national vision around which much of the population can coalesce even if some may lose out in the short-run. This strong process of state legitimation plays an important role in facilitating active measures to promote productive capacity, such as the construction of infrastructure and investment in education and training.

1.2 *Hydropower as driver of economic growth and access to sustainable energy*

In many LDCs, access to energy, particularly sustainable energy, is a major constraint to building productive capacity. Bhutan is fortunate to possess hydropower potential because of its location in the Himalayas, and the Royal Government of Bhutan has actively promoted hydropower as an engine of development. Installed capacity stands at around 1,500 megawatts, just a small share of the estimated technically feasible capacity of 24,000 megawatts. Hydropower is the biggest source of government income, with two government companies contributing two-fifths of state revenues, a third of exports and a fifth of GDP. The construction of several major hydro projects in coming years will increase the contribution of hydropower even further. Under an agreement with the Government of India an additional capacity of 10,000 MW is planned by 2020. Whilst three plants with a combined capacity of 3,000 MW are currently under construction, others are still in the planning stage or preliminary construction stage.

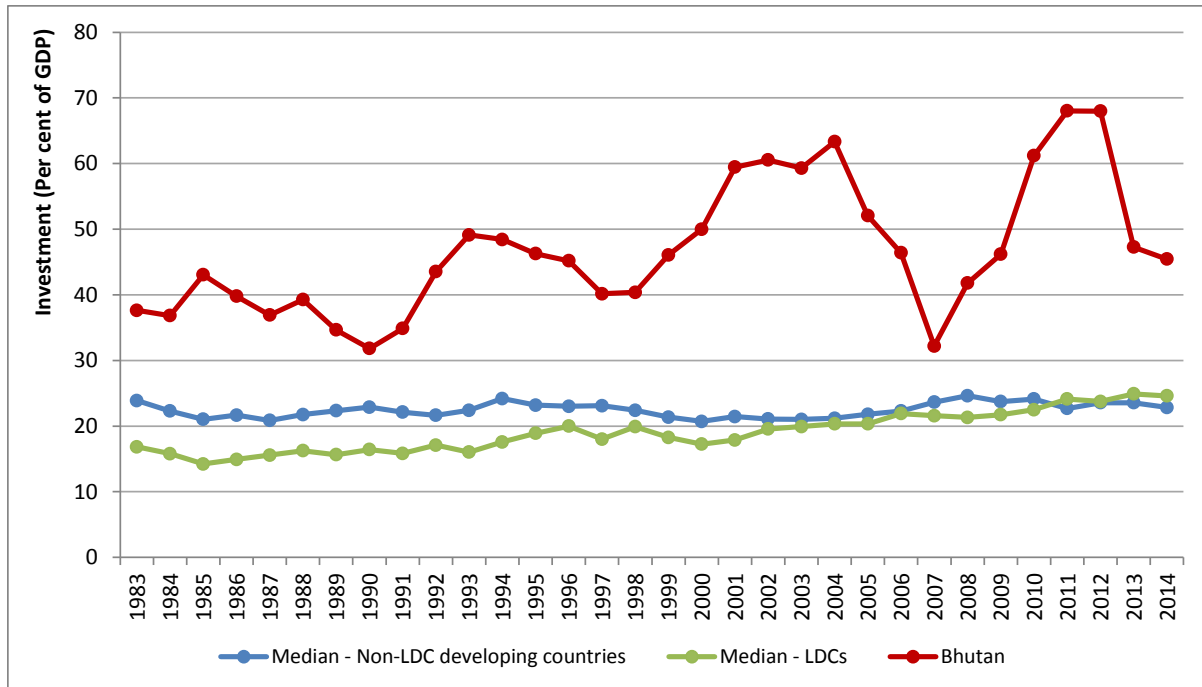
The capital-intensive nature of hydropower helps explain the very high and volatile share of investment in GDP (see figure 6), which in 2011 and 2012 was the highest in the world and in 2014 still the sixth largest, though government infrastructure investment is also important. The rate of investment, nonetheless, is much higher than in other LDCs, and forms an important path toward successful graduation.

The major investments also explain the high and volatile share of construction in GDP. Most hydropower plants are undertaken under a special arrangement between Bhutan and India,¹⁰ which helps reduce financial risk. Current hydropower plants are governed by an intergovernmental agreement, under which projects are owned by the Royal Government of Bhutan, but financed by the Government of India through grants and loans. Electricity not used domestically is sold to India at a price determined when the projects are commissioned (and periodically reviewed thereafter) on basis of a “cost plus” (covering construction, financing, operation and maintenance costs as well depreciation and capital return) approach (IMF, 2014), so that cost risk is effectively born by India.¹¹ Hydrological risks affecting electricity production, though, may still be borne by Bhutan.

Figure 6: Gross fixed capital formation, Bhutan

¹⁰ One smaller plant only for the domestic market had been financed through development cooperation with Austria; two plants have been co-financed by ADB.

¹¹ Several projects under development will be joint ventures between Bhutan and (public) Indian power companies, with Bhutan maintaining the majority and financing still to be provided by India.



Source: UNSD National Accounts Main Aggregates Database, accessed 31 October 2016.

The major hydropower investments not only serve as a source of revenue, but also to achieve Bhutan’s energy goals. Whereas around 75 per cent of electricity is exported to India, the projects also enable the country to improve availability, accessibility and affordability of electricity. While in 2003 only 40 per cent of Bhutanese households had electricity access (NSB, 2003), the rate increased to 99.6 per cent for urban and 87.3 per cent for rural households (BLSS 2012). Now, under a rural electrification project, the rural electrification rate stands at 95.5 per cent (GHC 2015), which is a very remarkable achievement. Part of the proceeds from exporting electricity are used to finance a progressive tariff schedule for domestic household consumers, under which larger consumer pay higher per unit charges; for rural consumer basic electricity consumption is free of charge in support of pro-rural development goals.

The sector is guided by the Sustainable Hydropower Policy 2008, aligning hydropower development with the overall development vision. Whereas hydropower development, in particular large scale projects, unavoidably lead to trade-offs between economic, social and environmental objectives, the GNH vision and its derivative policies provide a framework to effectively address these trade-offs. For example, Bhutanese policies demand consultation with affected communities, compensation for affected landowners, and afforesting twice the area deforested due to hydropower development. It should be noted, however, that larger projects currently under construction or development are raising more concern among communities and NGOs, in particular due to environmental impacts (Vasudha-Foundation, 2016).

1.3 Nascent economic diversification

Employment in hydropower projects faces natural limits. Three of the five plants currently operating together employ only 1,400 persons. While almost 95 per cent of the employees are Bhutanese, very few are from affected communities (Vasudha-Foundation, 2016). Whereas construction generates

huge employment, most construction is undertaken by Indian companies with Indian workers. This shows limited upstream linkages of hydropower projects in Bhutan. These are partly due to lack of sufficient productive capacity in Bhutan for undertaking large scale projects, but could to some extent also be explained with the large influence of India in developing the hydropower projects.

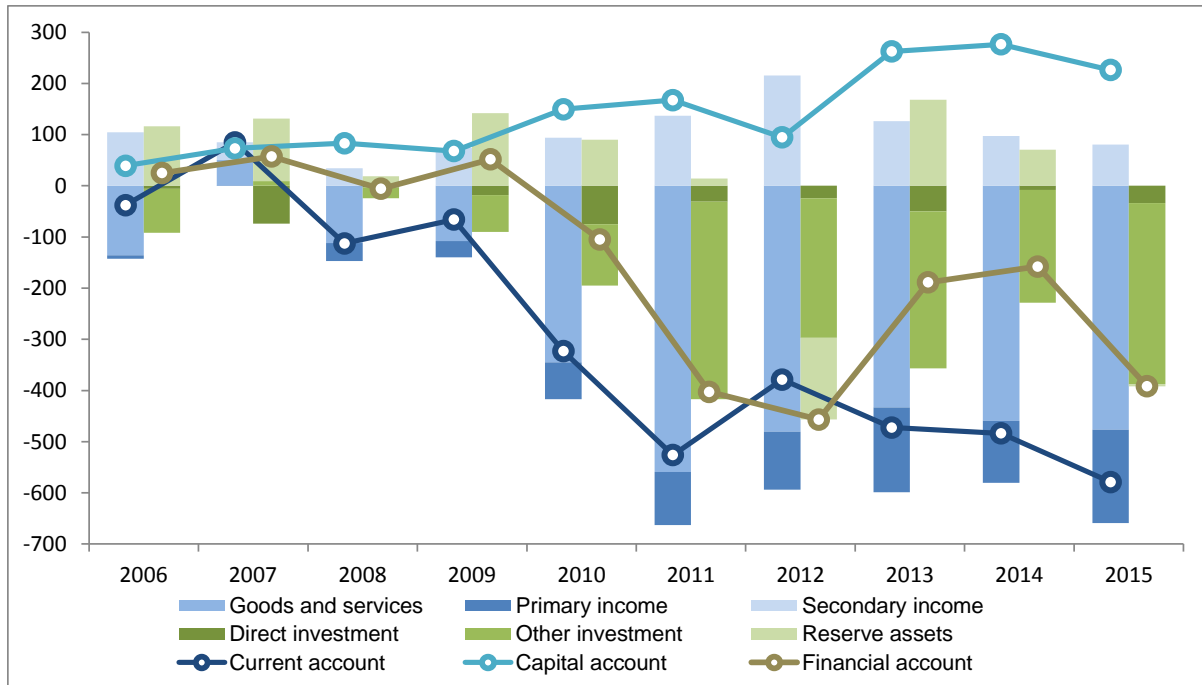
Bhutan, however, has been more successful in harnessing downstream linkages. The country has been establishing basic manufacturing of ferro-alloys, which is electricity intensive and requires locally available ores. Concentrated at Pasakha and Phuentsholing on the Indian border, ferro-alloys, ferrous-silicone, calcium carbide, manganese and silicone carbide together have in recent years comprised half of exports (the destination being India) and over a tenth of GDP, although the contribution is declining as a result of a fall in world prices. Bhutan is somewhat unique among small LDCs in that its economic growth has relied to some extent on mid-level manufacturing.

The services sector continues to grow, including Thimphu Techpark, which forms a small but growing source of employment and economic activity near Thimphu (see below). Bhutan has increasingly benefited from tourism and the hospitality industry, based on the country's history, landscape and largely unspoiled natural environment. Again, a notable characteristic of tourism development in Bhutan is the alignment with its natural vision. To minimize negative environmental and cultural impacts associated with mass tourism, the government decided to limit visitor numbers and appropriate part of the corresponding economic rents. Visitors are obliged to pay a minimum of US\$200 per day (\$250 in the high season), which includes a US\$65 royalty charged by the government plus food, accommodation, local transport and guides. Tourism arrivals rose to 155,121 in 2015, with total spending estimated at \$71 million, approximately 4% of GDP.

1.4 Macroeconomic stabilization

An expansionary macroeconomic context is critical to the development of productive capacity. In Bhutan the nature of the dominant hydropower sector risks jeopardizing macroeconomic stability. Bhutan is not affected by Dutch disease, as the local currency is irrevocably pegged to the Indian Rupee and inputs (capital and labour) to the sector are mostly imported and do not significantly affect domestic prices. Moreover, the development governance structure limits other negative impacts of natural resource exploitation such as conflicts over rents or weakened incentives to develop alternative sectors. However, Bhutan has faced challenges in maintaining monetary stability. Hydropower investments require significant imports from India and high demand for Indian rupees that generate export revenues (and hence inflows of rupees) once the plants start operating. Consequently, the current account exhibits large swings, whereas the capital account is generally more stable and positive due to development aid in particular from India (see figure 7). In 2011/2012, Bhutan faced a major shortage of rupees, forcing the Royal Monetary Authority to liquidate reserves, resort to short-term commercial borrowing and ultimately impose additional capital control measures to maintain the peg. The current account deficit widened further in recent years, but has been balanced by loans and higher capital transfers (both hydropower related) rather than by depleting reserves.

Figure 7: Balance of payments in Bhutan (million US Dollars)



Source: IMF Balance of Payments, accessed 14 November 2016. Note that in the standard presentation of the BoP we have: Current account + Capital account = Financial account – Errors and Omissions.

Bhutan possesses sufficient reserves, covering more than nine months of imports even in the 2011/2012 financial year of the rupee shortfall. However, less than 4 percent of reserves were in rupees, the currency (which is not fully convertible) actually needed for most transactions. After the crisis, the share of rupees in reserves has increased and stood at 18 percent in 2014/15. However, this ratio is still regarded as too low, so that the mismatch of reserve composition could become problematic again (IMF, 2016). This underscores that not only the amount of international reserves but also the composition matters. The experience also shows the potential benefits of a stabilization fund that can serve as effective ex-ante sterilization mechanism of time-varying natural resource related flows (Rashid, 2012). Such a fund could receive rupee inflows of the Royal Government of Bhutan and pay for necessary imports and interest on hydropower loans, without channeling these flows through the domestic banking system. This mechanism would also stabilize credit and money supply, though this might also reduce seigniorage as a source of government revenue.

How to build on achievements so far

The growth identification and facilitation framework (GIFF) is one way of helping identify products which take advantage of a country's latent comparative advantage and the possibilities arising due to catch-up, as well as excluding the improbable. It is designed to help policy makers understand how to use the limited resources available to solve the first mover problem and attract labour intensive industries. The six steps of the GIFF (Lin 2012, 181-182) are: choosing the right target, removing binding constraints, attracting global investors, scaling up successful self-discoveries, recognizing the power and magic of industrial parks, and providing limited incentives to the right industries.

The government development strategy focuses on hydropower; cottage, small and medium-sized industries; mining; tourism and hospitality; and agriculture development. The aim of the GIFF, however is to further specify certain industries within this broad focus by identifying a shortlist of industries to target as pioneer firms that may be experiencing increased costs due to changes in local factor endowments. Once pioneer firms invest and achieve quick wins, their success will demonstrate the potential gains of investment in Bhutan. Normally, benchmark countries would be identified and possible products chosen, but Bhutan's situation is so unique that no realistic comparator could be found.

The analysis that follows is a significantly amended and shortened version of a full GIFF study. Whilst the current study does not identify an exhaustive list and departs from the conventional approach, it makes suggestions based on the background analysis and on Bhutan's latent comparative advantage.

As part of the project, firm-level surveys were conducted to collect first-hand data, although data was limited since respondents were reluctant to identify cost information due to its sensitivity. From the small number of firms which responded with sufficient data to draw conclusions, notably, some of the greatest costs were electricity and transportation. Although this is insufficient to eliminate any sectors, it reinforces the implications of Bhutan's relative factor costs. Specifically, it confirms that transportation costs are relatively high, restricting trade. In addition to transportation cost, the small-scale nature of domestic production increases production costs. This is particularly pronounced in the agriculture and livestock sector dominated by smallholder farmers, with an average landholding size of 0.8 acres.

Not only is it important to identify potential targets for investment and export, it is sensible to eliminate those which are non-viable, particularly because of government restrictions. Two pillars of the GNH philosophy emphasize sustainable development and conservation of the natural environment. Industries contrary to the cultural and environmental values of Bhutan are disallowed. For example, mining minerals for sale in primary or raw form, activities that impose harmful effects on environment, and tobacco-based products are prohibited from investment.¹² Mining and tobacco-related sectors can be excluded from the analysis. Although some heavy manufacturing sectors may have comparative advantage due to the availability of cheap and stable electricity, they should be excluded due to the extra costs imposed by environmental regulations.

¹² Foreign Direct Investment Policy. 2010. Ministry of Economic Affairs: RGoB. See Appendix 5.

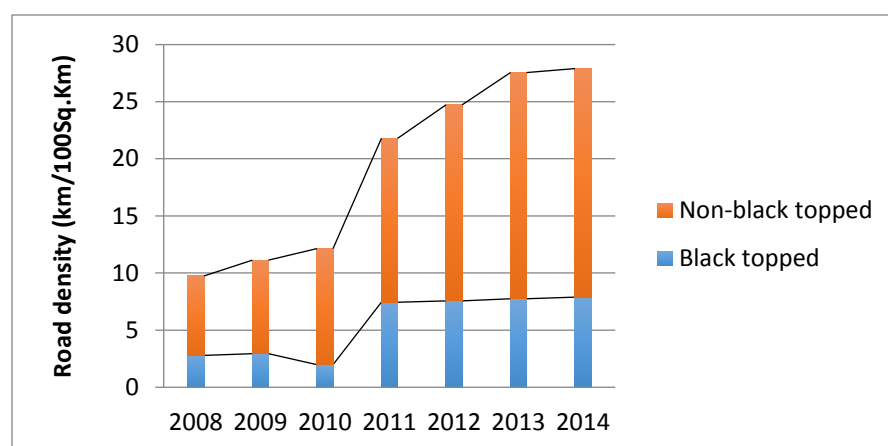
I. Tackling Binding Constraints

Transportation is a major obstacle within and beyond Bhutan's border, given that the country is landlocked, and the terrain obstructs movement and raises costs. Labour is the second most important binding constraint because of its importance for labour-intensive industries. Access to finance both internationally and domestically presents a major challenge.

1.1 Transport

Bhutan is restricted by landlocked, mountainous terrain with only 2.9% cultivated land distributed between mountain valleys with steep land gradients.¹³ Hence, products that are especially hard to transport should be excluded. As a mountainous country, Bhutan suffers from limited regional and international connectivity. This is especially restrictive in the tourism and industrial sectors. Bhutan's only international airport is constrained by inadequate transport capacity.¹⁴ The country's road density has been increasing steadily, but road quality remains unsatisfactory as only 7.89% of all roads have asphalt.¹⁵

Figure 8: Road density (km/100sq.km), by type (2008-2014)



Source: Bhutan Statistic Yearbook 2015. Department of Roads. Ministry of Works and Human Settlement, Thimphu. Road density calculation by author, using Bhutan land area as 38,394 sq.km.

In the industrial sector, limited road infrastructure raises transportation costs and obstructs access to international markets. The table below shows the costs of transporting from Bhutan to international markets. Bhutan's costs to import and export are much higher than those in many South Asian countries such as Bangladesh, Pakistan, and India. To be competitive, Bhutan needs to reduce transportation costs by improving road infrastructure that links its industrial hub and regional markets or find proportional cost savings in other areas, such as labour or electricity.

¹³ Bhutan RNR Statistics 2015

¹⁴ Asian Development Bank. 2014. Country Partnership Strategy: Bhutan, 2014–2018.

¹⁵ Department of Roads. 2015. Statistical Yearbook of Bhutan: 2015 Ministry of Works and Human Settlement, RGoB.

Furthermore, border crossing facilities require upgrades particularly in terms of custom and transport formalities. Bhutan’s industrial activities are concentrated in the south, where the country’s major industrial estates and cross-border facilities are located. Most freight transport occurs by road and about 85% of imported goods pass border-crossing point near Phuentsholing in southwestern Bhutan.¹⁶ However, the existing border infrastructure cannot accommodate current traffic flow.¹⁷ Costly cargo movement between industrial centers and across borders curtails the country’s trade and industrial potential.

Table 4: Regional Comparison of Costs and Times for Transportation.

Country	Cost to import (US\$ per container)	Cost to export (US\$ per container)	Time to import (days)	Time to export (days)
Afghanistan	\$5,680	\$5,045	91	86
Bangladesh	\$1,515	\$1,281	33.6	28.3
Bhutan	\$2,330	\$2,230	37	38
Pakistan	\$1,005	\$765	18.4	20.7
Maldives	\$1,610	\$1,625	22	21
India	\$1,462	\$1,332	21.1	17.1
Sri Lanka	\$690	\$560	13	16
Nepal	\$2,650	\$2,545	39	40

Source: WDI DataBank. 2016

To address the issue of connectivity, the Royal Government of Bhutan has participated in several joint projects with neighboring countries and international development agencies. The Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicles Agreement for the Regulation of Passenger, Personal and Cargo Vehicular Traffic, signed in 2015, is expected to facilitate easy movement of people and goods across borders to reduce trade transaction costs.¹⁸ It will be important to consider the volume of vehicular traffic Bhutan can accommodate with its limited road infrastructure. This could lead to potential traffic congestion and pollution risks on Bhutanese highways. Domestic linkages between industrial centers will be also improved upon the completion of Southern East-West Highway (SEWH).

Since terrain is a hard binding constraint, Bhutan should look to other factors such as PTAs, electricity and labour productivity, and reduce these costs in the long term. In the short term, dry ports strategically placed near industrial centers can help mitigate costs.

1.2 Labour

Although the statutory minimum wage in Bhutan was among the lowest in South Asia, labour costs in Bhutan have recently risen. According to the International Labour Organization (ILO), Bhutan’s minimum wage of \$51.19 was the second lowest in South Asia in 2013, slightly higher than the Indian

¹⁶ Japan International Cooperation Agency. 2014. Data Collection Survey on Transport Infrastructure Development for Regional Connectivity in Bhutan. Final Report. Oriental Consultants Co., Ltd. Ingerosec Corp.

¹⁷ Asian Development Bank. 2014.

Mishra, Rahul. 2015. BBIN: A New Tool in India’s Sub-Regional Diplomacy: Policy Brief. ¹⁸ Indian Council of World Affairs.

\$51.02 minimum wage.¹⁹ However, the labour cost in Bhutan is much less competitive than this. The minimum wage for unskilled labour recently jumped to \$100.55.²⁰ Firm Surveys also show that average monthly wage for unskilled labour in Bhutan is \$110.02 (the figure here is indicative due to the small sample size).²¹

Table 5: South Asian Regional Comparison on Statutory Minimum Wages²² (USD per month)

Country	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
2006	-	\$24.11	-	\$37.87	-	\$45.35	\$30.26	\$29.48
2007	-	\$24.13	-	\$41.50	-	\$49.68	\$46.95	\$37.31
2008	-	\$24.23	-	\$47.81	-	\$65.94	\$63.59	\$48.77
2009	-	\$24.07	-	\$53.71	-	\$59.30	\$63.18	\$51.23
2010	\$86.11	\$43.07	-	\$56.86	\$242.19	\$62.79	\$70.00	-
2011	\$106.95	\$40.46	\$64.28	\$64.07	-	\$83.76	\$68.07	-
2012	\$98.19	\$36.65	\$56.14	\$55.95	-	\$72.77	\$76.61	-
2013	\$90.29	\$67.86	\$51.19	\$51.02	-	\$86.03	\$97.67	-

Source: International Labour Organization. 2016. ILOSTAT Database. As accessed June, 2016.

Another reason why actual wages in Bhutan are higher is the Bhutan Vocational Qualifications Framework (BVQF). Adopted by the Ministry of Labour and Human Resources, the BVQF is used to identify skill levels by issuing national certificates (NCs). It should be noted that the entry requirements for NC-1 are not very high. The NC-1 certificate is for single processes which are limited in range, repetitive and familiar, and within closely defined contexts. Since this is a fair description of low skilled labour, low skilled manufacturing firms may face a slightly higher rate. As such it is vague and may apply to low-skill labour. Thus employers may face a higher wage under the BVQF.

¹⁹ More recent data for Maldives and Sri Lanka is not available.

²⁰ MoLHR. 2016. "External Office Memo 2326" Ministry of Labour and Human Resources MoLHR, RGoB. Data is converted via the average exchange rate in the first quarter of 2016.

²¹ CNSE 2016. Bhutan Firm Survey. As conducted May -June 2016. Center for New Structural Economics, Peking University, Beijing, China.

The minimum wages here in terms of USD are converted via the annual average exchange rate according to IFS database, IMF.

²² The minimum wages here in terms of USD are converted via the annual average exchange rate according to IFS database, IMF. Missing data is unavailable.

Table 6: Revised Statutory Minimum Wage Rates in Bhutan by Worker Classification

Level	2010	2016
NC-3+ ²³	\$112.24	\$151.52
NC-3	\$102.88	\$133.75
NC-2	\$91.19	\$118.78
NC-1	\$84.18	\$109.43
Unskilled	\$77.16	\$100.55

Source: Ministry of Labour and Human Resources. 2016. "External Office Memo 2326" Ministry of Labour and Human Resources (MoLHR). RGoB. Data is converted via the average exchange rate in the first quarter of 2016.

Although a minimum wage should be able to cover living expenses, a population survey would be required to accurately measure the average cost of living. This is beyond the scope of the current report.

²³ NC-3+ requires 2 years of work experience as an NC-3.

Minimum wages and qualifications are not the most accessible wage data available on Bhutan. However, firm data from the CNSE Bhutan Firm Survey confirms that this is a fair representation of costs for unskilled based on a small sample size.

There may be concern that Bhutan's small labour supply may increase wages, although 56% of the population works in subsistence agriculture and could provide additional workers for industry. It should also be considered that Indian nationals can work within Bhutan without a visa.²⁴ Although they still require a work permit, but this is a much lower standard in terms of skills and knowledge particularly in the construction sector. The Department of Labour can adjust these requirements to allow more Indian labour whenever necessary to prevent the increase of labour prices.

Labour quality in Bhutan has also failed to match the demand in the hiring market. According to the CNSE firm survey, 100% of responding firms claimed that it is difficult to find qualified, skilled labour.²⁵ The shortage of skilled labour is reflected in the high illiteracy rate of the labour force. In 2015, 56.7% of the Bhutan labour had never experienced any formal education,²⁶ and more than half (50.2%) of manufacturing workers remain illiterate.²⁷ Although the high governmental expenditure in Bhutan has made great progress in improving the net enrollment rate, and a small number of key workers are very well educated, this does not improve the majority of the current labour force. The surge in school enrollment needs more time to increase its impact. A limited proportion of employees are skilled; NSE proposes to take advantage of this by selecting labour intensive industries which require large quantities of unskilled labour.

One advantage of Bhutan's education system is that it has used English as a medium of education since 1961.²⁸ This could allow foreign firms to enter and train the educated population without a language barrier, and foreign managers with English proficiency could work directly with employees. Therefore, a possible area is to also venture into IT enabled call centers. The Thimphu Tech

Foreign Labour

The survey undertaken for this project shows that it is common practice for firms to hire foreign labour. India is the main resource of both low-skilled labour and professionals. Firms describe that foreign workers are “cost competitive”, “more reliable”, “experienced” and “technical”.

A civil engineering company identifies “lack of expertise in Bhutan” as the main obstacle to growing its business in Bhutan. “Job culture is still at infancy,” the company says, “all professionals are in the government service – the diversity of professionals in the private sector is limited as opportunity seldom arises.” To tackle this obstacle, this company established contact with Indian firms to bring in foreign experts. However, government rules are restrictive. “If work permits to foreign professionals could be granted then it will help grow my business,” the company states.

²⁴ Department of Labour. Handbook on Recruitment and Employment of Foreigners. 2016.

²⁵ CNSE. 2016.

²⁶ Department of Employment. 2015. Labour Force Survey Report 2015. Department of Human Resources, RGoB.

²⁷ Ibid.

²⁸ Tobgye, Sonam. Education System in Bhutan – Past, Present, and Future: A Reflection. <http://www.judiciary.gov.bt/html/education/publication/educationCJB.pdf>

Park facility is now at full capacity. Other locations may be developed, or another facility may be built adjacent to the present location.

The government should offer to subsidize training to increase worker productivity, which can mitigate the high labour costs. This program can also be expanded to pay secondary school graduates and qualified college graduates to acquire internships at the plants to accelerate skills transfer.

Bhutan has low literacy rates, yet this does not need to mean that Bhutan has low labour productivity. Training adult workers, emphasizing productivity, and providing internship programs under experience foreign managers can help mitigate the low initial skills.

1.3 Finance

Bhutanese banks have struggled to provide access to finance, especially to the potential SME initiators in private sectors. The interest rate spread, which is the difference between lending rate and deposit rate, has been the highest in the region, surpassing the South Asian regional average by more than eighty percent in 2014.²⁹ This indicates that potential investors in Bhutan have to ensure a minimum 10.15% return rate on investment. The high interest rate spread in Bhutan imposes considerable pressures on potential borrowers, discourages them from lending, and impedes economic development. Possibilities to raise capital externally could be explored using sovereign guarantees. The cost of capital is cheaper in countries like Singapore, a country with which Bhutan has good relations.

Capital Limitations

Two companies in heavy industry point out the issue of limited access to capital. In the companies' opinion, lending by financial institutions is underdeveloped and the cost of borrowing is too high. Both companies are planning to increase operations in Bhutan in the next 12 months. Company A hopes to diversify into other sectors, and Company B will add more product lines due to demand in India. Improved access to cheaper capital is in demand.

²⁹ WDI DataBank. 2016.

Table 7: Interest Rate Spread in South Asia³⁰

Year	Bhutan	Bangladesh	Maldives	Nepal	Sri Lanka	South Asia	LDC's
2000	7.75%	6.94%	6.13%	3.50%	6.99%	6.94%	12.04%
2001	8.25%	7.34%	6.03%	2.92%	8.38%	7.34%	13.42%
2002	8.25%	7.83%	6.04%	3.15%	3.95%	6.04%	13.00%
2003	10.00%	8.18%	6.50%	4.42%	4.34%	6.50%	12.16%
2004	10.50%	7.64%	6.50%	5.85%	4.40%	6.50%	12.52%
2005	9.50%	5.91%	6.50%	5.88%	5.13%	5.91%	12.21%
2006	9.50%	6.22%	6.50%	5.75%	6.05%	6.22%	10.97%
2007	9.50%	6.82%	6.50%	5.75%	8.00%	6.82%	10.75%
2008	11.75%	6.72%	6.50%	5.60%	8.00%	6.72%	10.10%
2009	11.75%	6.40%	6.50%	5.50%	5.06%	6.40%	10.73%
2010	12.00%	5.86%	6.33%	4.38%	3.32%	5.86%	10.22%
2011	9.50%	3.24%	6.02%	-	2.98%	4.63%	9.95%
2012	8.50%	1.32%	6.75%	-	4.62%	5.68%	9.83%
2013	8.00%	1.81%	7.34%	-	2.39%	4.86%	-
2014	10.15%	3.92%	7.28%	-	0.34%	5.60%	-

Source: WDI DataBank. 2016.

1.4 Taking advantage of preferential trade access

Bhutan is likely to face major challenges in diversifying trade, given its binding constraints and the fact that it may soon graduate from LDC status. Nevertheless, for the time being the country enjoys tariff exemptions on certain exports under the US Generalized System of Preferences (GSP) and the EU Everything but Arms (EBA) program which permits everything but weapons to be imported from LDCs duty and quota free (DFQF). While these preferences do not differentiate among LDCs, the aggregate of two largest markets in the world is big enough for each country to capture a significant share. Although large-scale goods export is likely to prove extremely challenging, Bhutan should not rule out taking advantage of these PTAs for products with the greatest comparative advantage. These exemptions could be leveraged as an investor incentive while still available.

If such a route is taken, first, products could be selected based on their EU trade preferences. This large market can provide essentially unlimited demand for products. Although Bhutan may struggle to compete directly with low-cost LDC neighbours such as Nepal and Bangladesh, one potentially interesting area is apparel. Since over 200 6-digit product codes have a 12% tariff within the 61 and 62 HS codes (knitted and non-knitted apparel and clothing accessories). These are the EU codes which should be first considered for export. Further the World Trade Organization (WTO) tariff database reports that none of the products entering the EU from other countries under these codes have been duty free from 2013-2015.³¹ This means that these products when exported from Bhutan would have

³⁰ Data for Pakistan is unavailable.

³¹ WTO. 2016. Tariff Download Facility. as accessed June, 2016. <http://tariffdata.wto.org/default.aspx>

a 12% cost reduction that competitors were not receiving (as of the end of 2015.) Immediately following these products Bhutan could consider HS codes 57, 58, and 55 (carpets, special woven fabrics, and man-made staple fibers). These products also have not had any importers receiving duty free exemptions.³² However their tariffs are less significant. (See the table below.)

Products could be selected based on a combined tariff benefit within both the US and EU. The US trade preferences are very selective, even for LDCs, and there is no single type of product which stands out. However, by examining the codes we can find those products which do overlap with our selection criteria and PTA advantages. (See Appendix 7) Unfortunately these products are so specific that they would exclude too many potentially successful products. In addition, firms are not only seeking to reduce costs but to increase competitiveness. Since no LDC-based competitors would receive benefits from the US in these categories, there is little advantage to be gained from the US by locating in Bhutan.

Table 8: Recommended Sectors with Preferential Market Access to EU (2013-2015)³³

HS Code	Number of Subcategories	Number of distinct tariffs	Average Tariff	Minimum Tariff	Maximum Tariff
61	106	147	11.7%	8.0%	12.0%
62	112	194	11.3%	6.3%	12.0%
57	21	39	7.3%	3.0%	8.0%
58	38	51	7.3%	5.0%	8.0%
55	107	143	6.2%	4.0%	8.0%

Source: WTO. 2016. Tariff Download Facility. as accessed June, 2016. <http://tariffdata.wto.org/default.aspx>

There is a single code which overlaps both categories and provides an instructive example: 6217.10.85.00 (Headbands not knitted or crocheted of less than 70% silk) This product receives a substantial 14.6% MFN tariff in the US to which Bhutan can claim exemption. However, this product falls under one of the few exceptions of 12% tariffs within 62 code for the EU and only receives a 6.3% tariff exemption. Although combined, these exemptions are still significant, the US benefits shift to 2.3% if the material is changed to silk. This typifies the variability and uncertainty of tariff variation within the US.

II. *Attracting Global Investors*

In 2015 the FDI net inflow into Bhutan was only 0.4% of GDP,³⁴ which in South Asia is only higher than Afghanistan and Nepal, which have both suffered considerably from political instability. The net FDI inflow per capita in Bhutan is even further behind the average level of South Asian countries, LDCs and Asian LDCs.

After FDI inflows began in 2002 the government has been trying to attract FDI through policy reforms and provisions for incentives. The revised 2010 FDI Policy made substantial improvements

³² Ibid.

³³ This is data for all three years. Data was identical for the codes listed.

³⁴ WDI DataBank. 2016. See Appendix 10.

in opening up sectors for investment.³⁵ Agro- and forest based manufacturing, hotels with 4 stars and above, and infrastructure facilities are priority sectors³⁶ and entitled to relatively reduced business approval procedures. Upon submission of required sector and environmental clearances, FDI priority activities are assessed by the Department of Industry while non-priority activities will be evaluated against further criteria.³⁷ (See table 9 below for evaluation criteria.)

Table 9: Criteria for approval of non-priority activity proposals

Item	Criteria
Value addition	40% or more
Foreign exchange	Positive foreign exchange flows
Financial capability	Demonstrated proof of source of funds
Employment generation	Clear long term plan
Benefits of FDI	Demonstrated need for FDI

Source: The Foreign Direct Investment Rules and Regulations 2012 (Amended December 30, 2014), Ministry of Economic Affairs.

Between 2006 and 2012 ferro-alloys benefited the most from FDI, distantly followed by hotels and hydropower.³⁸ Foreign developers are also invited to participate in infrastructure projects under the PPP model.³⁹ The Thimphu Tech Park attracted the Assetz Property Group of Singapore as a joint developer with an investment of 225 million Nu.⁴⁰ However, with respect to attracting more diversified investment, the current FDI scenario suggests that the effectiveness of FDI policies and incentives are secondary to business prospects. This is demonstrated in that agro-based and forest manufacturing are listed as priority sectors, but FDI inflows remain low in these categories.⁴¹

Table 10: 2006-2012 Total FDI by category

FDI Category	% of Total FDI
Ferro alloys	39.30 %
Hotels	9.90 %
Hydro power	8.51 %
Banking	5.54 %
Food	6.80 %
IT	4.54 %
Other	25.33 %

Source: Department of Industry, MoEA. Diagnostic Trade Integration Study 2012

To capture FDI for key activities, Bhutan needs to re-adjust its policy and link incentives to targeted activities that can diversify its economy. However, the most convincing evidence of Bhutan's potential will come from compelling pioneer cases. If Bhutan can attract a few successful FDI-driven industries, then they will convince more firms to follow suit. To some extent this is already happening in the case of Thimphu TechPark.

³⁵ All sectors are open to FDI except "negative and prohibited" industries. See Appendix 5.

³⁶ For complete list of priority sectors see Appendix 4.

³⁷ The Foreign Direct Investment Rules and Regulations. 2012. (Amended December 30, 2014)

³⁸ Ministry of Economic Affairs. (MoEA) 2013. Diagnostic Trade Integration Study. 2012. MoEA, RGoB.

³⁹ MOEA. 2010. Framework for Private Participation in Infrastructure. MoEA, RGoB.

⁴⁰ MoEA. 2013

⁴¹ Ibid.

III. The Power and Magic of Industrial Parks

In countries facing infrastructure shortcomings and challenging business environments, Special Economic Zones (SEZs) may be used to overcome barriers to firm entry, attract FDI, and encourage industrial clusters. SEZs enable the allocation of scarce resources on a limited scale in order to create quick wins. These small economic enclaves can prove experimental industrial policies and incentives. Industrial estates allow the government to make desirable improvements in infrastructure and business environment, which will reduce transaction cost and encourage industrial clustering. Special Economic Zones take a step further: government can create islands of policy flexibility without changing a broader sea of national policy. Bhutan's 2010 Economic Development Policy states that the policy and rules and regulations on SEZs shall be framed by 2010/2011. However, at the time of writing, there has been little further progress on SEZ regulation and development. Unfortunately, delays can discourage investors.

Bhutan's trade and industrial activities are concentrated in Pasakha and Phuentsholing, taking advantage of their proximity to the Indian market and the presence of two industrial estates. Starting from the 9th Five Year Plan, the Royal Government of Bhutan has been committed to the development of several new industrial estates around the country but experienced significant delays.⁴² Of the five new industrial estates proposed by the 9th Five Year Plan, only Pasakha Industrial Estate has been established on schedule. In 2012, 18 industries in Pasakha Industrial Estate employed about 2,100 workers.⁴³ The 10th Five Year Plan revised locations of previously proposed industrial estates and prioritized the development of Dhamdum, Motanga and Jigmeling industrial estates.⁴⁴ However, as of 2016 there has been little progress. The table below gives an overview of proposed industrial estates restated in the 11th Five Year Plan.

⁴² RGoB. 2003. 9th Five Year Plan. <http://www.gnhc.gov.bt/five-year-plan/>

⁴³ 2012 Diagnostic Trade Integration Study, MoEA

⁴⁴ RGoB. 10th Five Year Plan 10th Five Year Plan. <http://www.gnhc.gov.bt/five-year-plan/>

Table 10: Proposed industrial estates

Industrial Estate	Location	Acres	Total Cost of Development (million Nu.)	Proposed Completion Schedule	Current Schedule
Jigmeling	Sarpang	755.77	800	9th Five Year Plan (2003-2008)	Infrastructure work scheduled to begin in 2016
Dhamdum	Samtse	613	300	10th Five Year Plan (2008-2013)	Infrastructure work scheduled to begin in 2016
Motanga	Samdrup Jongkhar	145.52	633.25	10th Five Year Plan (2008-2013)	Preliminary work begins in 2016
Bondeyma	Mongar	110.34	500	9th Five Year Plan (2003-2008)	To be completed by June 2016

Source: Gross National Happiness Commission Secretariat and Office of Prime Minister and Cabinet reports⁴⁵ compiled by the author.

The delay is likely to stem from a range of constraints, including lack of finance, lengthy land acquisition, stringent environmental assessments, and the uncertain situation in border areas.⁴⁶ While it is understandable that external factors might compound the delay, the government should make every effort to update investors and the public in a timely and candid manner. Keeping stakeholders informed on both progress and delays will strengthen mutual trust between investors and the government and may mitigate the negative effects of delays.

Thimphu TechPark

The success of Thimphu TechPark, launched in 2012, suggests that Information Communications Technology (ICT) has strong potential and that additional ICT zones may be developed.

“Initially people expressed a lot of skepticism about the park,” says CEO Dr. Tshering Cigay Dorji, “but these things take time.” It was only after US online photo company Scan Café ramped up its initial 20-strong pilot project in May 2013 that 11 others followed from Bangladesh, Switzerland and elsewhere, specializing in telecoms, business process outsourcing and online data.

⁴⁵ The state of the TSA-WA-SUM, Fifth session of the second parliament of Bhutan, 16th June, 2015, Office of Prime Minister and Cabinet.

2015 Outcome Evaluation of Economic Development policy: Policy measures for industrial development in Bhutan, Gross National Happiness Commission Secretariat. RGoB.

RGoB. 2013. 11th Five Year Plan. <http://www.gnhc.gov.bt/five-year-plan/>

RGoB. 2003.

RGoB. 2008.

⁴⁶ 2015 Outcome Evaluation of Economic Development policy: Policy measures for industrial development in Bhutan, Gross National Happiness Commission Secretariat. RGoB.

Prospective Strategic Assessment of the Proposed Dhamdum Industrial Estate, RGoB.

Scan Café showed that Bhutan was a good place to do business. Most of the ingredients were already in place – good education, competitive wages, cheap electricity and low rent – they just hadn't yet been used in ITC. Most Bhutanese are taught English from an early age, and the country scores particularly well on the human assets index that is part of the official LDC category.

Bhutan is following a path well-trodden by successful tech exporters: start small and cheap, discover markets through trial and error, and later move into more sophisticated activities.

In the spirit of the GIFF, these are the pioneer firms which have invested and achieved quick wins, their success demonstrating to other companies the potential benefits from investment in Bhutan. A total of 750 workers are employed at the park, which is an important source of employment for young people in the capital. Employment at the park is more than half that at three of the five hydropower plants (although a small proportion of the 350,000 economically-active national workforce).

According to the Bhutan Diagnostic Trade Integration Study (DTIS), ITC fits well with the GNH environmental vision. E-commerce and e-government have a low environmental impact because they localize service access and delivery and are more efficient than old, carbon-heavy industries.

Thimphu TechPark is an example of using an SEZ to attract FDI to demonstrate sector potential. Once the potential has been demonstrated, demand increases as more firms follow. SEZs allow policy flexibility, infrastructure and targeted incentives for attracting these pioneer firms. Although industrial estates provide infrastructure, the effects can be amplified with supplementary policy support.

The worldwide services offshoring industry has grown rapidly over the past decade – and continues to do so in spite of the global economic slowdown, creating many jobs in developing countries including neighboring India and Bangladesh. New types of services are being handled remotely and across borders, increasing in value-addition and complexity the sections of the value chain that can be performed offshore. With recent and planned improvements in telecom connectivity together with the availability of electricity, and the interest already shown by some foreign investors, Bhutan could continue to benefit from this trend toward business process outsourcing (BPO). Where human resources remain a challenge, the simpler type of operations of back office outsourcing, such as data entry, billing, payroll and benefits administration may be most suitable. The level of education and language skills of some Bhutanese provides a workforce trainable for front office outsourcing, including customer-related services such as marketing or technical support, usually through call centers. The attraction of such business, however, requires a clear strategy including explicit investor targeting to identify and incentivize prospective companies to offshore specific, suitable front and back office work. As shown in the following box, other, less-developed LDCs have already begun to take advantage of ITC and BPO.

Business process outsourcing and ITC in Haiti

In Haiti, a small, very low income island LDC emerging from an earthquake which devastated much of the capital, several BPO-type activities began on a small scale. An Irish company, Taxback.com, opened an office and has created a few jobs in a call centre to provide tax documentation assistance to international customers. Samasource, a non-profit organization based in San Francisco, started operations after the earthquake, employing disadvantaged people to translate text messages related to the emergency. Digital workers were hired by Samasource for longterm microwork which was expected to range from creating digital handicrafts such as online greeting cards or flower bouquets, to data entry, Google-map analysis and transcriptions. These are relatively low-skilled operations which can create much-needed employment. Digicel, the largest mobile telephone operator in the Caribbean, moved its call centres to Haiti. The lessons for Bhutan – a more advanced economy with relatively sophisticated workforce and human resources – should be clear. IT services are not only a source of employment for the minority with high end training in technology, but with suitably available and priced Internet access can be a source of employment for significant numbers of lower-skilled workers and may be a step on the ladder to higher value-adding activities.

Source: Haiti Diagnostic Trade Integration Study

Bhutan's development of industrial parks and SEZs would benefit from improved coordination among executive departments, ministries, and relevant commissions. The Industrial Infrastructure Development Division (IIDD) under the Department of Industry, Ministry of Economic Affairs is responsible for the implementation of industrial estate establishment. But the complexity of SEZ development requires participation from multiple government agencies, including the Gross National Happiness Commission (GNHC), National Environment Commission (NEC), and National Land Commission (NLC).⁴⁷ Research has identified inconsistent and conflicting information regarding updates on industrial estates from several governmental documents. Most noticeably, the 2014-2015 Budget Report refers to the four proposed establishments as "SEZs", while the 2015 Prime Minister's Annual Report categorizes them as "industrial estates". Mixed taxonomy will confuse and discourage potential investors.

It is critical that the RGoB maintains efficient communication channels at multiple levels of governance. An investment promotion board should be established to facilitate communication and synchronize implementation. It should be composed of representatives from GNHC, NEC, NLC and other relevant agencies, and would help solve the twin problems of coordination and implementation. The investment promotion board would be responsible for attracting FDI, providing fiscal incentives, and removing bureaucratic obstacles for exporting firms.

If the government is to be successful it will have to act quickly and decisively to put the proposed industrial estates and SEZs into practice. Rather than trying to tackle various projects and challenges on a large scale, the government should start with one or two pilot SEZs to achieve quick wins. Bringing in qualified and credible zone developers may be a way to circumvent these challenges and build out the opportunity for Bhutan's SEZs. In order to make these pilot zones a success, the government should provide incentives to attract pioneer firms.

⁴⁷ Prospective Strategic Assessment of the Proposed Dhamdum Industrial Estate, RGoB.

IV. *Providing Limited Incentives to Appropriate Industries*

The Royal Government of Bhutan should compensate pioneer firms with tax incentives for a limited period, direct credits for investments, and/or access to foreign exchange. The incentives provided should seek to drive FDI into sectors consistent with the country's comparative advantage and factor endowments. The first mover problem is an obstacle based on a lack of information. Initial investors have no previous firms to demonstrate the profitability of foreign firms in the region. Further, after a firm has entered Bhutan, this firm produces information which successive firms can use whether the firm succeeds or not. Pioneer firm incentives compensate for this additional risk.

Bhutan's government enacted the Revised Rules & Regulations on Fiscal Incentives in 2010, attempting to stimulate investment and economic growth. A large proportion of the fiscal incentives targeted firms new to Bhutan.⁴⁸ These policies focused on new industries and may be considered Bhutan's pioneer incentives. Further, except for some general incentives, specific sectors were the focus of most of the document. The tourism sector, for instance, is among the sectors that received the most fiscal incentives.⁴⁹

As Bhutan receives industrial transfer, it must be more integrated into the global market. To win competitiveness in the international arena, an efficient customs system must be developed to facilitate export and import. However, Bhutan ranks the lowest efficiency of customs clearance process among South Asia countries,⁵⁰ and worse, it takes the longest time to clear exports according to the Enterprise Survey (see Table 11 below). Trade facilitation is therefore a major binding constraint to the export potential of Bhutan.

Table 11: Comparison of customs clearance across South Asian countries

Country	Logistics Performance Index: Efficiency of customs clearance process (1=low to 5=high)	Average time to clear exports through customs (days)
Bangladesh	2.09	7
Bhutan	2.09	12.7
Afghanistan	2.16	8.1
Nepal	2.31	8.5
Sri Lanka	2.56	7.6
India	2.72	5.8
Pakistan	2.84	11.4
Maldives	2.95	-

Source: WDI DataBank. 2016.

Note: Logistics Performance Index is for 2014. Average time to clear exports through customs of Sri Lanka is from 2013; Afghanistan and India is from 2014. Bangladesh, Pakistan, and Nepal is from 2013. Bhutan is from 2015. Maldives is unavailable.

Respondents to the CNSE firm survey also reported administrative challenges to the growth of their businesses.⁵¹ Some of this may be in response to requirements for claiming exemptions. For example, applying for the sales tax exemption on imported raw materials and packaging material requires nine

⁴⁸ Revised Rules & Regulations on Fiscal Incentives. 2010.

⁴⁹ Ibid.

⁵⁰ WDI DataBank. 2016.

⁵¹ CNSE. 2016.

different documents.⁵² Within export-oriented SEZs, this procedure can be fast-tracked or pre-approved, saving firms' time and money.

In spite of the detailed fiscal incentives put forward in 2010, the associated impacts have not been obvious. The missing component may be compensation for pioneer firms. The government should seek not only to renew these incentives, but to place new incentives which specifically target services firms.

Most of the incentives have expired, but interviews report that there is a movement to renew or replace them, something which should be an urgent priority. Delays may indicate a change in policy, and in the meantime, firms will be unable to benefit. In addition, the government needs to address the obstacles that have constrained firms from benefiting from previous fiscal incentives, specifically transportation and labour costs. Benefits targeted to compensate labour-intensive pioneer firms should also be considered.

Conclusions and possible options

This study has argued the government should play an active role in structural transformation, particularly to help the economy overcome first-mover and externality problems. The report is not intended as an overview of the economy or of all areas of future economic potential, but in a nutshell, the government of Bhutan should facilitate attracting FDI, removing binding constraints and promoting SEZs with targeted policies – particularly in services and more specifically ICT and BPO. This is by no means to discount the importance of major existing industries such as tourism, agriculture and hydropower, nor to downplay the associated challenges and opportunities, but it needs to be recognized that diversification is an urgent and pressing task, particularly given the risks of reliance on the growing hydropower sector. As industries transfer, Bhutan will become more integrated into the global market and other investors may follow. In addition, the learning-by-doing effect may lead to the emergence of local entrepreneur-led firms.

Building productive capacity is critical to successful LDC graduation in that it provides a long-term platform for sustainable social and economic development beyond reliance on international support measures such as trade preferences and aid. Although LDC graduation is an important milestone, it is only a stage in the process and should not be seen as the end-point. In Bhutan's case, it is unlikely to have a major negative impact on the economy given the low utilization of preference rates and donor plans to reduce aid independently of graduation.

Nonetheless there are links between the LDC criteria and productive capacity. Increased productive capacity raises income and can improve human assets, whilst diversification, all other things being equal, improves a country's score on the economic vulnerability index. Diversification is particularly important given Bhutan's increasing reliance on hydropower and its continuing dependence on India.

Bhutan's unique GNH approach is seen as an asset, and something that contributes to prosperity and national wellbeing rather than being a burden. GNH has contributed to the relatively effective use of hydropower resources and to the preservation of the natural environment, as well as to ensuring that the benefits of development have been reasonably equitably shared. GNH is also a source of state legitimacy and reflects social cohesion. Whilst some success has been achieved in diversification, a

⁵² Revised Rules & Regulations on Fiscal Incentives. 2010.

continued expansionary and stable macroeconomic environment is essential to underpin continued success.

Certain limits preclude specialization in particular industries; notably tobacco and heavy industry as a result of GNH priorities. Two key binding constraints of immediate concern: labour and transportation costs. In addition, limited access to finance has made the investment environment difficult, preventing local firms from scaling up and the development of SMEs; however, this is largely a problem for the medium term. Whilst in theory Bhutan could target the garment sectors which have a tariff advantage in Europe, this may prove difficult given the country's small size, transportation drawbacks, relatively high costs and the existing scale of competition in this area.

Preliminary research conducted for this report indicates that Bhutan could utilize the current global industrial transfer window to develop new sectors and to build on the success of Thimphu TechPark and other parks. Establishing SEZs helps alleviate the costs imposed by hard and soft binding constraints and allows governments with limited resources to focus efforts on a small scale in order to encourage FDI. Services have more potential given Bhutan's remoteness, geography, the availability of power and the lower rent than Bangladeshi or Indian cities. This should enable Bhutan to leverage its relatively competitive labour costs to encourage firms to transfer to Bhutan, facilitating industrial upgrading, economic transformation, and product and trading partner diversification.

Appendixes

1: List of priority activities (production and manufacturing)

Sector	Minimum Project Cost (millions of Nu)	Maximum Foreign Investor's Equity (%)	Conditions/Requirements
Education			
i. Primary Education			
ii. General Secondary Education			
iii. Higher Education	200	100	As per sector policy
Health			As per sector policy:
i. All-inclusive Specialized Hospital Services			“All inclusive specialized hospital services” applies to hospitals providing at least one procedure presently referred outside country and having its own complete set of diagnostic services and labouratory facilities.
ii. Specialized Medical Services			
iii. Specialized Dental Services			
iv. Specialized Medical Labouratory Services			
v. Specialized Diagnostic-imaging Services			
vi. Specialized Traditional Medical Services	200	100	
Hotels/Resorts - Five Star & Above	200	100	None
Infrastructure Facilities			
i. Multi-dwelling Residential Buildings			
ii. Non-residential Buildings			
iii. Outdoor Sports and Recreation			
Facilities such as Golf Courses, Botanical Garden and Others			
iv. Highways, Bridges, Tunnels and Roads			
v. Airfield Runways/Airports			
vi. Industrial Estates, Industrial Parks,			
vii. SEZ, AEZ			
viii. IT Parks			
ix. Economic Cities			
x. Knowledge Cities	200	100	PPP model wherein the facility returns to the government on expiration of the term.

xi. Sport Cities			
xii. Health/Wellness Centers			
xiii. Dry Ports			
xiv. Land Reclamation			
xv. Other Similar Activities			
Research & Development	10	100	Established firms employing a minimum of 5 experts
Head Office Services	5	100	None
IT	5	100	None
ITES:			
i. Inside IT Parks & SEZs	3	100	None
ii. Outside IT Parks & SEZs	5	74	None
Construction Services	100	74	None
Waste management			PPP Model wherein the facility returns to the Government on expiration of the term.
i. Recycling of Domestic Waste			
ii. Waste management Services	25	74	
Water Supply and Management			PPP Model wherein the facility returns to the Government on expiration of the term.
Urban Water Treatment and Supply	25	74	
4 Star Hotels	25	74	None
Technical and Vocational Education	25	74	None
Transportation & Related Services			
i. Green & Non-fossil Fuel Based Transportation			
ii. Mass Transportation			
iii. Railways, Ropeways & Cable Cars	25	74	PPP model wherein the facility returns to the government on expiration of the term.
Consultancy Services	10	74	Established firms employing a minimum of 5 experts
Financial Services	25	51	As per Financial Services Act

Source: Foreign Direct Investment Policy 2010, Ministry of Economic Affairs, Royal Government of Bhutan.

2: Negative and prohibited list

NEGATIVE LIST
Activity
Media and Broadcasting
Distribution services including wholesale, retail and micro trade
Mining for sale of minerals in primary or raw form
Hotel 3 star and below
General Health Services
Industries that do not meet the Certificate of Origin requirements
Activities in the Prohibited List
PROHIBITED LIST
Activity
Activities that violate any relevant laws of the Kingdom of Bhutan
Activities that threaten national security and public order
Activities that has harmful effects on public health, environment and Bhutanese morals and culture
Arms, ammunitions and explosives
Production of hazardous chemicals (as per the restricted list of NEC)
Activities based on imported waste
Production, display and sale of Pornographic materials
Gambling and Betting
Tobacco and tobacco based products

Source: Foreign Direct Investment Policy 2010, Ministry of Economic Affairs, Royal Government of Bhutan.

3: Difference between duty for MFN countries and Bhutan in US and EU

US			EU			
HS Code	Description	Tariff %	Average Tariff	Minimum Tariff	Maximum Tariff	HS Code
4202.32.20.00	Articles for pocket or handbag (Not elsewhere stated: other)	20.0%	6.7%	3.7%	9.7%	420232
4202.39.90.00	Articles for pocket or handbag: (With outer surface of sheeting of plastic: other)	20.0%	3.7%	3.7%	3.7%	420239
6217.10.85.00	Clothing accessories (Not elsewhere stated, textile material, not knit: Headbands, ponytail holders and similar articles)	14.6%	6.3%	6.3%	6.3%	621710
4421.90.30.00	Wooden articles (Not elsewhere stated: Wood blinds, shutters, screens and shades, all the foregoing with or without their hardware: Consisting of wooden frames in the center of which are fixed louver boards or slats, with or without their hardware)	10.7%	1.3%	0.0%	4.0%	442190
4202.22.35.00	Handbags (With outer surface plastics, textile material: wholly or in part of braid: of abaca)	8.4%	6.7%	3.7%	9.7%	420222
4418.71.90.00	Assembled flooring panels (For mosaic floors: Other: Other)	8.0%	3.0%	3.0%	3.0%	441871

4202.92.04.00	Containers (Not elsewhere stated with outer surface plastic or textile: Beverage bags whose interior incorporates only a flexible plastic container of a kind for storing and dispensing potable beverages through attached flexible tubing)	7.0%	6.3%	2.7%	9.7%	420292
3918.10.32	Wall or ceiling coverings (With a backing of textile fibers: with a backing of man-made fibers: Other)	6.5%	6.5%	6.5%	6.5%	391810
3918.90.20.00	Wall or ceiling coverings (With a backing of textile fibers: with a backing of man-made fibers)	6.5%	6.5%	6.5%	6.5%	391890
5703.10.20.00	Carpets of wool or fine animal hair, tufted: (Hand-hooked)	6.0%	8.0%	8.0%	8.0%	570310
5703.30.20.00	Carpets of other man-made textile materials, tufted (Hand-hooked)	6.0%	8.0%	8.0%	8.0%	570330
5703.20.10.00	Carpets nylon, polyamides, tufted (Hand-hooked)	5.8%	8.0%	8.0%	8.0%	570320
3918.10.10.00	Floor coverings (Vinyl tile)	5.3%	6.5%	6.5%	6.5%	391810
3918.10.20.00	Floor coverings (Other)	5.3%	6.5%	6.5%	6.5%	391810
3918.10.40	Floor coverings (Roll, tile, vinyl chloride: other)	5.3%	6.5%	6.5%	6.5%	391810
3918.90.10.00	Floor coverings (Roll/tile not vinyl	5.3%	6.5%	6.5%	6.5%	391890

	chloride: floor coverings)					
3918.90.30.00	Wall or ceiling coverings (With a backing of textile fibers: Other)	5.3%	6.5%	6.5%	6.5%	391890
4202.29.10.00	Handbags (of vulcanized fiber or paperboard: of plastics)	5.3%	3.7%	3.7%	3.7%	420229
4202.39.10.00	Articles for pocket or handbag (Not elsewhere stated: of plastics)	5.3%	3.7%	3.7%	3.7%	420239
4421.90.60.00	Wooden articles (Not elsewhere stated: toothpicks, skewers, candy sticks, ice cream sticks, tongue depressors, drink mixers and similar small wares: other)	5.1%	1.3%	0.0%	4.0%	442190

Source: Harmonized Tariff Schedule, U.S. International Trade Commission. <https://hts.usitc.gov/>
WTO. 2016. Tariff Download Facility. as accessed June, 2016. <http://tariffdata.wto.org/default.aspx>

4: Fiscal incentives according to revised rules & regulations on fiscal incentives 2010

Sectors	Incentives & Benefits	Goods/Service Applied	Note	
General	Sales Tax and Custom Duty Exemption	Import of plant and machinery	Expires Dec.31 2019	
		Import of permissible raw materials	Expires Dec.31 2019	
		Primary packaging materials for manufacturing industry	Expires Dec.31 2019	
		Purchase of software/hardware for credit/debit cards or for electronic payments use by financial institutions	Expired Dec.31 2015	
		Purchase of electric cars/hybrid cars, including its spare parts, and cars that run on renewable energy	Expired Dec.31 2015	
	Income Tax Holiday	Export earning of Existing entities (established between 2004 and 2009)		10 years
		Export earning of Newly established entities (established between 2010 and 2015)		5 years
		Existing Business entities, whose date of establishment and commercial operation of the business must be between 1st July 2007 and 31st Dec 2009		
	25% Reinvestment Allowance	The reinvestment allowance to be claimed would be limited only on the reinvestment made on infrastructure, plant and machinery		
	Taxable Income Deduction	Research & Development (R & D), including Grant made by an entity for R & D		
up to 15 % tax rebate	industries adopting modern environmentally-friendly technologies		Expired Dec.31 2015	
Cottage and Small Industries (CSI) and Co-operatives	Income Tax Holiday	New cottage and Small Industries and Co-operatives established between 2010 and 2015	10 years	
	Income Tax Holiday	Cottage and Small Industries and Co-operatives located in the interior areas	Additional 10 years	
	Income Tax Waiver	Interest income of financial institutions through lending at preferential rates to CSIs (including those provided under	5 years, credit granted from	

		entrepreneurship development programs) and co-operatives	2010 to 2015
	Sales Tax and Custom Duty Exemption	Individual artisans and craftsmen in the rural areas	Expired Dec.31 2015
Waste Management and Recycling Industry	Income Tax Holiday		15 years
	Sales Tax and Custom Duty Exemption	The import of plant and machinery for waste management/recycling activities	Expired Dec.31 2015
Agricultural Sector	Income Tax Holiday	Commercial farming and related processing of its products	10 years, additional five years for commercial farming of organic products
	Sales Tax and Custom Duty Exemption	farm machinery, including any other agricultural inputs	Expired Dec.31 2015
Information and Communications Technology (ICT) Sector	Income tax holiday	the IT-park developer, engaged in the establishment of the IT park and related infrastructure and IT promotion services	15 years
	Income Tax Holiday	IT/ ITES businesses operating within IT park	10 years
	Income Tax Holiday	IT-enabled service businesses located outside IT park	5 years
	Sales Tax and Custom Duty Exemption	Computers and related hardware and software for IT enabled service providers	Expired Dec.31 2015
	Sales Tax and Custom Duty Exemption	Imports made by IT Park developer	Expired Dec.31 2015
Tourism Sector	Income Tax Holiday	Newly established high-end hotels, established and commencing commercial operations any time from Jan.1 2010 to Dec.31, 2015	10 years
	Income Tax Holiday	Newly established high end hotels in the eastern region (Mongar, Trashy Yangtse, Lhuentse, Trashigang, Pema Gatshel & Zhemgang)	15 years

	50% Reinvestment Allowance	Total capital expenditure incurred shall be given once for the up-gradation of existing hotels to 3 stars and above	Expired Dec.31 2015
	Up to 5% of the Assessed Net Profit	Entertainment expenses	
	Sales Tax and Custom Duty Exemption	Vehicles for tour operators	Expired Dec.31 2015
	Sales Tax and Custom Duty Exemption	Camping, trekking, rafting, kayaking, boating and such other equipment for adventure tourism	Expired Dec.31 2019
	Sales Tax to be Charged on Published or Actual Charged (Discounted) Room Rents rather than on Rack Rates	Hotels	
	Sales Tax and Custom Duty Exemption	Import of furniture & fixtures, kitchen & laundry equipment, mattresses & linens, cutlery & crockery, sanitary wares, electrical fittings (excluding wires) and other items by hotel industry	
	Income Tax Exemption	Farm houses registered with TCB as hospitality units from Jan.1 2010 to Dec.31 2015	granted from 2010 and 2015
	Income Tax Holiday	Lodges/guest houses registered with TCB as hospitality units	10 years
	Waiver of Daily Tourist Tariff/Royalty	Foreign participants in meetings, international conventions and exhibitions (MICE)	
Film and Media Sector	Income Tax Holiday	Entities producing animation films	10 years
	Income Tax Exemption	Earnings from production of films, documentaries and serials for public broadcasting	5 years
	Income Tax Holiday	Media service providers viz. print media, and broadcasting entities, established and commencing commercial operations on or before 31st of December 2015	5 years
	Sales Tax and Custom Duty Exemption	Specific professional equipment required by the media service providers viz. print media, broadcasting, film production entities and animation film industry	Expired Dec.31 2015
	30% Sales Tax Exemption	Bhutanese cinema	

	Exemption From Royalty	Filming or production of promotional noncommercial audio visual programs or movies or documentaries of Bhutan by foreign media organizations	
Construction Sector	Sales Tax and Custom Duty Exemption	Green building materials	Expired Dec.31 2015
Transport Sector	Sales Tax and Custom Duty Exemption	Buses used by passenger transport entities	Expired Dec.31 2015
	Income Tax Holiday	Taxi/car-hire service providers, commencing commercial operations from Jan.1 2010 to Dec.31 2015	5 years
Education Sector	Income Tax Holiday	Educational and vocational institutes newly established outside Thimphu and Phuentsholing city areas, commencing commercial operations from Jan.1 2010 to Dec.31 2015	up to 15 years
	Sales Tax and Custom Duty Exemption	Imported textbooks, journals, periodicals, teaching aid materials and library books and furniture and fixtures	Expired Dec.31 2015
	Sales Tax and Custom Duty Exemption	Buses for educational institutes	Expired Dec.31 2015, at a maximum of five buses
	Income Tax Holiday	Education city developer, engaged in the establishment of the education city and related infrastructure and education promotion services	Expires Dec.31 2030
	Income Tax Holiday	Educational institutes operating within the education city, commercially operated from Jan.1 2010 onwards	Expires Dec.31 2030
	Sales Tax and Custom Duty Exemption	Imports made by Education City developer	Expires Dec.31 2030
	Sales Tax and Custom Duty Exemption	Businesses operating in the Education City (Tenants of the Education City), irrespective of the time of starting of the commercial operation of the business	Expires Dec.31 2030
	Health Sector	Income Tax Holiday	Newly established pharmaceutical shops in the rural areas, licensed and established from Jan.1 2010 to Dec.31 2015

	Income Tax Holiday	Newly established high-end private health facilities, licensed and established from Jan.1 2010 to Dec.31 2015	10 years
	Sales Tax and Custom Duty Exemption	Imports made by Department of Health, Ministry of Health through RGoB funding, private medical colleges, clinics and institute of traditional medicines	Expired Dec.31 2015

Source: Revised Rules & Regulations on Fiscal Incentives 2010.

5: FDI Net Inflow Comparison (BoP, million current USD)

Year	LDC Average	South Asian Region Average	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
1996	\$2,293.50	\$3,512.00	\$0.69	\$13.53	\$1.40	\$2,426.06	\$9.32	\$19.16	\$921.98	\$119.87
1997	\$3,141.86	\$4,895.32	-\$1.46	\$139.38	-\$0.70	\$3,577.33	\$11.41	\$23.06	\$716.25	\$430.06
1998	\$4,355.15	\$3,547.67	-\$0.01	\$190.06		\$2,634.65	\$11.52	\$12.02	\$506.00	\$193.42
1999	\$5,738.18	\$3,080.43	\$6.04	\$179.66	\$1.05	\$2,168.59	\$12.32	\$4.35	\$532.00	\$176.41
2000	\$3,993.27	\$4,367.54	\$0.17	\$280.38		\$3,584.22	\$22.31	-\$0.48	\$308.00	\$172.94
2001	\$6,703.76	\$6,147.34	\$0.68	\$78.53		\$5,471.95	\$20.54	\$20.85	\$383.00	\$171.79
2002	\$6,399.03	\$6,769.07	\$50.00	\$52.34	\$2.43	\$5,626.04	\$24.72	-\$5.95	\$823.00	\$196.50
2003	\$10,099.36	\$5,461.48	\$57.80	\$268.29	\$3.37	\$4,322.75	\$31.77	\$14.78	\$534.00	\$228.72
2004	\$8,399.16	\$7,819.28	\$186.90	\$448.91	\$8.86	\$5,771.30	\$52.93	-\$0.42	\$1,118.00	\$232.80
2005	\$6,565.12	\$10,835.97	\$271.00	\$760.50	\$6.21	\$7,269.41	\$52.99	\$2.45	\$2,201.00	\$272.40
2006	\$9,576.67	\$25,539.64	\$238.00	\$456.52	\$6.12	\$20,029.12	\$63.83	-\$6.65	\$4,273.00	\$479.70
2007	\$13,848.50	\$32,472.49	\$188.69	\$651.03	\$73.86	\$25,227.74	\$132.43	\$5.74	\$5,590.00	\$603.00
2008	\$17,783.78	\$51,156.33	\$46.03	\$1,328.42	\$3.14	\$43,406.28	\$181.26	\$1.00	\$5,438.00	\$752.20
2009	\$16,888.05	\$39,636.71	\$197.51	\$901.29	\$18.30	\$35,581.37	\$157.96	\$38.27	\$2,338.00	\$404.00
2010	\$15,602.42	\$31,562.39	\$54.20	\$1,232.26	\$75.27	\$27,396.89	\$216.47	\$87.74	\$2,022.00	\$477.56
2011	\$23,085.60	\$40,651.62	\$57.62	\$1,264.73	\$31.14	\$36,498.65	\$423.53	\$94.02	\$1,326.00	\$955.92
2012	\$19,506.12	\$27,786.09	\$61.53	\$1,584.40	\$24.38	\$23,995.69	\$227.98	\$92.00	\$859.00	\$941.12
2013	\$22,386.41	\$32,848.89	\$39.66	\$1,905.80	\$49.78	\$28,153.03	\$360.82	\$74.24	\$1,333.00	\$932.55
2014	\$27,814.54	\$39,516.83	\$48.76	\$2,496.94	\$8.38	\$33,871.41	\$363.27	\$5.83	\$1,778.00	\$944.25

Source: WDI DataBank. 2016

6: Comparison of FDI net inflows as % of GDP

Year	LDC Average	South Asian Region Average	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
1996	1.3%	0.7%		0.0%	0.4%	0.6%	2.1%	0.4%	1.5%	0.9%
1997	1.7%	0.9%		0.3%	-0.2%	0.8%	2.2%	0.5%	1.1%	2.8%
1998	2.5%	0.6%		0.4%		0.6%	2.1%	0.2%	0.8%	1.2%
1999	3.3%	0.5%		0.4%	0.3%	0.5%	2.1%	0.1%	0.8%	1.1%
2000	2.0%	0.7%		0.5%		0.8%	3.6%	0.0%	0.4%	1.1%
2001	3.5%	1.0%	0.0%	0.1%		1.1%	2.3%	0.3%	0.5%	1.1%
2002	3.1%	1.0%	1.2%	0.1%	0.5%	1.1%	2.7%	-0.1%	1.1%	1.1%
2003	4.3%	0.7%	1.3%	0.4%	0.5%	0.7%	3.0%	0.2%	0.6%	1.2%
2004	3.1%	0.9%	3.5%	0.7%	1.3%	0.8%	4.4%	0.0%	1.1%	1.1%
2005	2.0%	1.0%	4.3%	1.1%	0.8%	0.9%	4.7%	0.0%	2.0%	1.1%
2006	2.5%	2.1%	3.4%	0.6%	0.7%	2.1%	4.3%	-0.1%	3.1%	1.7%
2007	2.9%	2.1%	1.9%	0.8%	6.2%	2.0%	7.6%	0.1%	3.7%	1.9%
2008	3.1%	3.3%	0.5%	1.4%	0.2%	3.5%	8.6%	0.0%	3.2%	1.8%
2009	2.9%	2.3%	1.6%	0.9%	1.4%	2.6%	7.3%	0.3%	1.4%	1.0%
2010	2.4%	1.5%	0.3%	1.1%	4.7%	1.6%	9.3%	0.5%	1.1%	0.8%
2011	3.0%	1.8%	0.3%	1.0%	1.7%	2.0%	17.3%	0.5%	0.6%	1.5%
2012	2.4%	1.2%	0.3%	1.2%	1.3%	1.3%	9.1%	0.5%	0.4%	1.4%
2013	2.5%	1.4%	0.2%	1.3%	2.8%	1.5%	12.9%	0.4%	0.6%	1.3%
2014	3.5%	1.5%	0.2%	1.4%	0.4%	1.7%	11.9%	0.0%	0.7%	1.2%

Source: WDI DataBank. 2016.

7: ISIC codes

Section	Divisions	Description
A	01–03	Agriculture, forestry and fishing
B	05–09	Mining and quarrying
C	10–33	Manufacturing
D	35	Electricity, gas, steam and air conditioning supply
E	36–39	Water supply; sewerage, waste management and remediation
F	41–43	Construction
G	45–47	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	49–53	Transportation and storage
I	55–56	Accommodation and food service activities
J	58–63	Information and communication
K	64–66	Financial and insurance activities
L	68	Real estate activities
M	69–75	Professional, scientific and technical activities
N	77–82	Administrative and support service activities
O	84	Public administration and defence; compulsory social security
P	85	Education
Q	86–88	Human health and social work activities
R	90–93	Arts, entertainment and recreation
S	94–96	Other service activities
T	97–98	Activities of households as employers; undifferentiated goods- and services- producing activities of households for own use
U	99	Activities of extraterritorial organizations and bodies