

## Thailand Logistics Trend: Logistics Performance Index

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### Abstract

Thailand economy is attractive and growing strong. Whilst logistics is key driving for any country competitiveness, Thailand logistics trend shows limitation. Focusing on World Bank's Logistics Performance Index, dated back to 2007, Thailand's logistics has not improved. The paper explores logistics performance trend together with GDP per capita of year 2007, 2010, 2012, 2014 and 2016. The discussion includes Thailand development status on 6 logistics performance, i.e., customs, infrastructure, international shipments, logistics quality and competence, tracking and tracing and timeliness. The findings indicate that Thailand logistics needs attention if to be compete or collaborate with the world. Attention areas included infrastructure, logistics quality and competence and tracking and tracing.

**Keywords:** Thailand, Logistics Performance Index

### INTRODUCTION TO THAILAND

Thailand is an upper-middle income, industrialized, developing country, locating in South-East Asia. Thailand is ranked at 46<sup>th</sup> in World Bank's Doing Business, attracting more than 62 USD billion of FDI in 2014. In 2016, GDP of Thailand is at 406.84 USD billion, by which 58% is from service sectors and 33% is from industry. GDP per capita is at 5,779.3 USD. Thailand has exported more than 208.4 USD billion. Top 5 exports are motor cars, parts and accessories, precious stones and jewelry, computer parts and devices, plastic beads, electronic integrated circuits. Since 2010, Thailand government has promoted Thailand as South-East Asia logistics hub with logistics system development projects. In year 2015 only, Thailand has approved private investment in logistics related projects of more than 233 USD million, including multimodal facility, commercial port, maritime service, etc. [1-3]

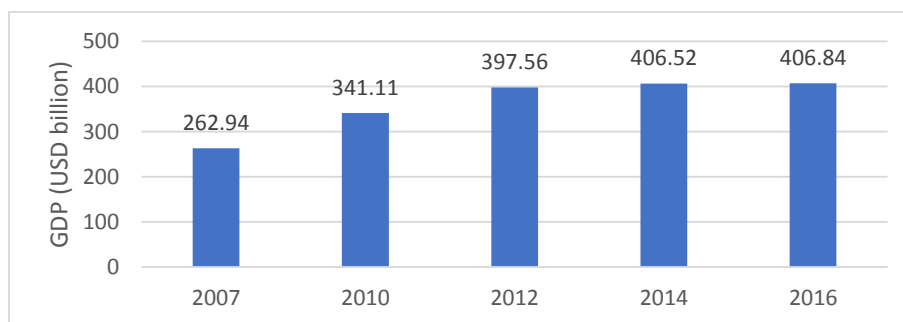


Figure 1: Thailand GDP: 2007, 2010, 2012, 2014 and 2016 [4]

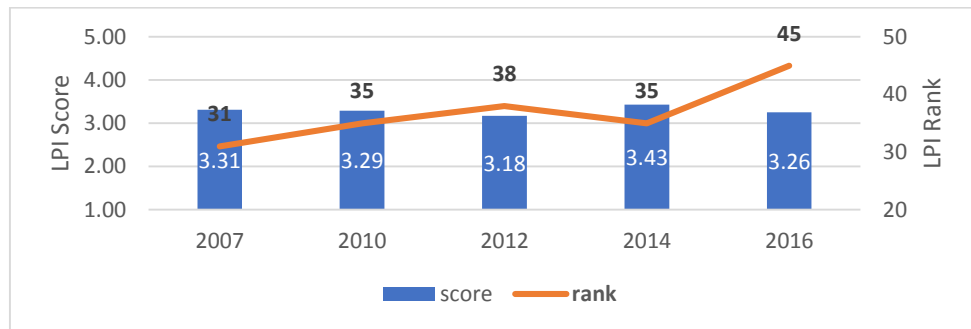
### LOGISTICS PERFORMANCE INDEXES

World Bank has developed an international logistics assessment tools, called "Logistics Performance Index (LPI)". LPI comprises of 6 components, i.e., The efficiency of customs and border management clearance, the quality of trade and transport infrastructure, the ease of arranging competitively priced shipments, the competence and quality of logistics services, the ability to track and trace consignments, the frequency with which shipments reach consignees within

scheduled or expected delivery times. The evaluation is based on theoretical and empirical research and on the practical experience of logistics professionals involved in international freight forwarding. In 2016, 1,051 logistics professionals participated in the survey for the LPI, assessing 160 countries around the world. [5]

Data used in this paper include LPI of Thailand in 2007, 2010, 2012, 2014 and 2016 published by World Bank's "Connecting to Compete 2016 - Trade Logistics in the Global Economy -

The Logistics Performance Index and Its Indicators”.



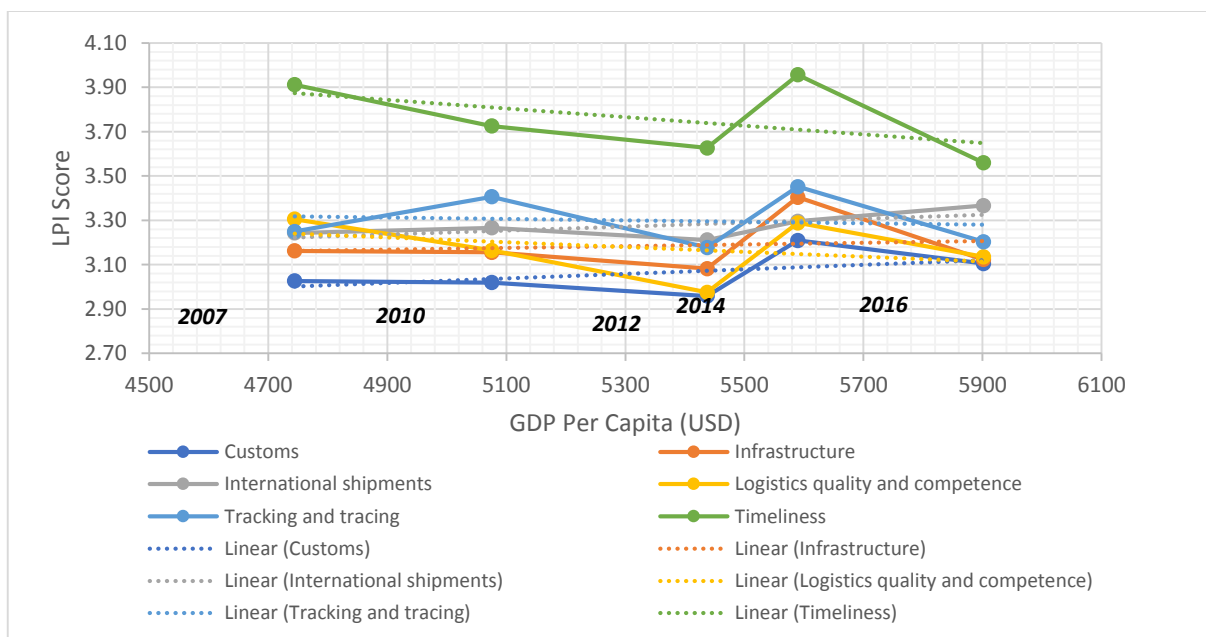
**Figure 1:** LPI Score and Rank of Thailand: 2007, 2010, 2012, 2014 and 2016 [5]

In overall LPI score (see Figure 1), Thailand is today scored 3.26 at the 45<sup>th</sup> rank out of 160 countries. The score and rank drop from 3.31, 31<sup>st</sup> in 2007, 3.29, 35<sup>th</sup> in 2010, 3.18, 38<sup>th</sup> in 2012 and 3.26, 35<sup>th</sup> in 2014.

are mapped with GDP per capita of Thailand. Where GDP per capita grows, logistics performance do not quite catch up. It can be seen, in general, that the Thailand logistics performance is quite consistent. The deviation is from 0.16-0.40 from 2007 to 2016. Some area are improved. Some are not. The following sections discuss on these 6 logistics performance perspectives.

**DISCUSSION**

Table 1 summarises LPI Score of Thailand in 2007, 2010, 2012, 2014 and 2016 based on 6 components. In Figure 2, LPI scores



**Figure 2:** 6 LPI Score of Thailand: 2007, 2010, 2012, 2014 and 2016 [5]

**Table 1:** 6 LPI Score of Thailand: 2007, 2010, 2012, 2014 and 2016 [5]

	2007	2010	2012	2014	2016
<b>Customs</b>	3.03	3.02	2.96	3.21	3.11
<b>Infrastructure</b>	3.16	3.16	3.08	3.4	3.12
<b>International Shipments</b>	3.24	3.27	3.21	3.3	3.37
<b>Logistics Quality and Competence</b>	3.31	3.16	2.98	3.29	3.14
<b>Tracking and Tracing</b>	3.25	3.41	3.18	3.45	3.20
<b>Timeliness</b>	3.91	3.73	3.63	3.96	3.56

*Customs*

Focusing on “Customs”, the figure reflects improvement in terms of customs, where it means the efficiency of customs and border management clearance has become better. Since 2007, Thailand has implemented e-Customs and massive improvement on the government service and infrastructure. This leads to preferable improvement in facilitating import/export and servicing trade.

In 2017, World Bank’s Doing Business investigates Thailand as well as other 189 countries on many business perspectives including “Trading Across Border”. This area reflects time and cost to export and import in terms of border and documentary compliances. Compared to those in East Asia and Pacific, Thailand is considerably well. However, compared with OECD high income, Thailand is far behind, as expected. Table 2 summarises key indicators of World Bank’s Doing Business 2017 – Trading Across Border. [2]

**Table 2:** World Bank’s Doing Business 2017 – Trading Across Border: Thailand, East Asia & Pacific and OECD High Income [2]

Indicator	Thailand	East Asia & Pacific	OECD High Income
Time to export: Border compliance (hours)	51	57	12
Cost to export: Border compliance (USD)	223	402	150
Time to export: Documentary compliance (hours)	11	73	3
Cost to export: Documentary compliance (USD)	97	132	36
Time to import: Border compliance (hours)	50	71	9
Cost to import: Border compliance (USD)	233	436	115
Time to import: Documentary compliance (hours)	4	71	4
Cost to import: Documentary compliance (USD)	43	128	26

*Infrastructure*

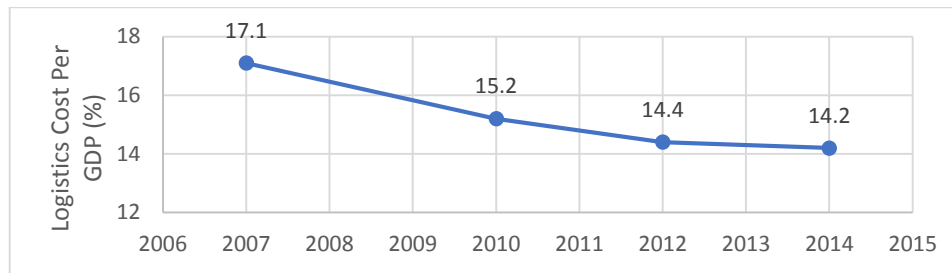
However, in terms of “Infrastructure”, the figure shows unpreferable trend. The infrastructure score slightly dropped from 2007. Even though there have been attempts in developing new trade and transport infrastructures for the past 10 year, such as high-speed train, dual-track train, highway, port, however, there is no concrete instalment yet. Therefore, the quality of trade and transport infrastructure is still questionable here.

*International Shipment*

International shipment is the only area that shows concrete improvement. The area indicates the ease of arranging competitively priced shipments. This can be because of both domestic and international factors. Domestically, there are many attempts both government and private to reduce logistics cost as well as facilitate logistics activities. Internationally, Thailand is still attractive to logistics service providers as the national and region’s economic grows continuously. Logistics service providers both Thai and multi-national have become key players and improve logistics and supply chain

performance. Since 2010, logistics cost of Thailand is declining. The cost is, however, at 14.1% per GDP (see Figure

3) which is relatively high compared to those developed countries, at somewhere under 10%.



**Figure 3:** Logistics Cost per GDP of Thailand: 2007, 2010, 2012, 2014 and 2016 [6]

### *Logistics Quality and Competence*

Federations of Thai Industry has reported that there are 215 logistics service providers in Thailand. 85% are small and medium size. Where 150 companies are Thai, their investment volume are lower than those 65 international companies. [7] Today, the competition is high. However, the competence and quality of logistics services are still low.

### *Tracking and Tracing*

Tracking and tracing is the ability to track and trace consignments. On this area, the score does not indicate any improvement. The score is up and down during the concern period. However, in general, it declines. This is perhaps the requirement can be higher from time to time as the market is today very sophisticated. Thai companies cannot quite catch up.

### *Timeliness*

Timeliness is the frequency with which shipments reach consignees within scheduled or expected delivery times. Even though, Thailand has the highest score among 6 components. The trend is declining. Surveying in the industry, Delivery In-Full-On-Time (Delivery DIFOT) has now becoming a main criterion for Thai company on logistics perspectives. They have tried to response to the customer on time, with reasonable cost. However, it seems Thailand companies cannot meet the supply chain requirement as yet.

## **CONCLUSION**

The paper explore Thailand logistics performance based on World Bank's Logistics Performance Index. It is to reflect if Thailand is improving in the right direction. Looking at trend of 6 logistics perspectives, i.e., customs, infrastructure, international shipments, logistics quality and competence, tracking and tracing and timeliness, it is suggestive that

Thailand is doing not quite well. The logistics performance has not generally improved since the 2007 to 2016. The only good sign is on timeliness indicator which also does not show concrete improvement.

The question is then arisen; "Is Thailand is ready for today competitive global supply chain?". From this paper, it is likely to be concluded that Thailand needs more.

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