Challenges Impeding Competitiveness of the Wooden Furniture Manufacturing Industry: the Case of Furniture Industry in Sarawak, Malaysia

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Abstract: Sarawak, being the largest state in Malaysia, is a major producer of tropical timber and timber products in the world. However, despite being blessed with abundant timber resources, it has a relatively small wooden furniture manufacturing industry, with insignificant exports compared with other timber-exporting countries. The present study sets up to identify the possible impediments to the growth of the furniture industry. Qualitative data was collected from different stakeholders of the furniture manufacturing industry via unstructured in-depth interviews. Using Porter’s Diamond of National Advantage framework, different problems and challenges posed by factor conditions, related and supporting industries, demand conditions, firm strategy and government were analyzed. Factor conditions concern the supply and productivity of factors of production. Sarawak furniture manufacturers face a shortage of timber supplies, higher transportation and utility costs, shortage of skilled manpower and difficulty in securing financing for business expansion. These have undermined the competitiveness of the manufacturers, relative to their counterparts in Peninsular Malaysia. Supporting industries are underdeveloped, resulting in poor supply chain integration. Most upstream timber producers are geared towards the export markets while furniture component parts have to be imported. The domestic furniture market is small and thus could not sustain the industry on a large scale. Consequently, furniture manufacturers lack sufficient capital and scale economies to adopt new manufacturing technologies. The problems faced by furniture manufacturers are further compounded by rigid government policies and cumbersome bureaucratic processes, many of which have disadvantaged small furniture manufacturers. Anti-tropical timber campaigns in importing countries pose a further threat to the export viability of Sarawak wooden furniture. The paper ends with a discussion of the role that the state government can play in facilitating the growth of the industry. It distinguishes between the neoliberal and structuralist perspectives of government intervention, highlighting the absence of studies on the development of tertiary wood-processing industries in the state.

Key words: Malaysia wooden furniture industry, Competitive advantage, timber

INTRODUCTION

The world production of furniture in 2010 is estimated to worth US$376 billion while annual trade in furniture for the past three years surpassed US$100 billion (CSIL 2010). Furniture has the highest value-added component among the major wood-based products. The industry promotes efficient use of timber resources and expands the range of economic activities within the forestry sector from the current harvesting of raw logs and downstream secondary timber-processing, to tertiary-level manufacturing and marketing of finished timber products. For timber-producing countries that seek to promote and develop downstream wood-processing industries, furniture manufacturing is therefore an ideal option.
Malaysia is currently the tenth largest exporter of wooden furniture in the world, with export value expecting to reach RM10 billion in 2010. Most of the furniture manufacturing activities are concentrated in the West Malaysian states of Johor, Selangor and Perak. In comparison, the East state of Sarawak has a relatively insignificant export-oriented furniture manufacturing industry. Sarawak’s earnings from wooden furniture export in 2008 amounted to RM27.82 million, which constituted a mere 0.42 percent of Malaysia’s total earnings of RM6.7 billion in the year. Sarawak, nevertheless, is endowed with rich timber resources and is among the largest supplier of semi-finished tropical timber products in the world. While these may provide the state with a comparative advantage in furniture manufacturing, the industry is small and oriented towards the domestic market. In 2008, wooden furniture accounted for only 0.37 percent of the state’s total export earnings from timber and timber products. Hence, by dint of its uniqueness, Sarawak is chosen in this paper as our case study. We aim to analyze the key challenges faced by furniture manufacturers in the state and discuss the role of the state government in the industrialization of the forestry sector. We also suggest the possible steps that can be taken to foster the development of the furniture manufacturing industry.

The competitive advantage of Sarawak lies in the production of timber and timber products which constitute key inputs to furniture manufacturing. However, the industry hitherto remains insignificant despite Malaysia being one of the largest producer and exporter of timber produce in the world. To identify the impediments to the growth of furniture manufacturing and to capitalize on the competitive advantage in timber production, we collect primary data using qualitative method of unstructured in-depth interviews. Unstructured interviews are defined as interviews in which neither the question nor the answer categories are predetermined (Minichiello et al. 1990). Punch (1998) described unstructured interviews as a method to understand complex behaviour of people without imposing any a priori categorization, which might limit the field of inquiry. Patton (2002) described unstructured interviews as an extension of participant observation. Unstructured interviews rely heavily on spontaneous generation of questions in a natural flow of the interactions. Care was taken to collect data on all possible perspectives on the challenges faced by the industry. A total of seven interviews were conducted. The interviewees comprise three owners of wooden furniture manufacturing companies, two owners of sawmills, a committee member of the Sarawak Timber Association and a committee member of the Sarawak Furniture Industry Association.

**Timber and Furniture Manufacturing in Malaysia: An Overview:**

Trade of tropical timber and timber products have fuelled the economic growth of many south-east Asian countries in the past three decades. Large-scale harvesting of timber resources in the Philippines, Malaysia, Indonesia and Thailand began during the 1960s, primarily to supply the Japanese and Korean markets. A significant portion of Malaysian tropical timber exports is from the state of Sarawak, which is the largest state in Malaysia with a land area of 12,330,296 hectares, of which 76.5 percent were classified as forest areas (FAO 1981). Sarawak emerged as the largest supplier of tropical logs and plywood in the south-east Asian region in the 1980s, after Indonesia tightened its forestry regulations and banned log export (Tachibana, 2000).

By early 1990s, rapid deforestation in the state gave rise to concerns over serious environmental degradation and oversupply in the timber market, which resulted in the weakening of log prices. In 1992, the state government imposed a log export quota, requiring at least 60 percent of harvested logs to be channeled into domestic downstream wood-processing industries. As a consequence, log exports declined 51 percent, from 15.8 million m3 in 1991 to 7.8 million m3 in 1995. Log exports further decreased to only 4.76 million m3 in 2001. The increase domestic log supply led to the expansion of secondary wood-processing industries. Most of the logs were processed and exported in the forms of sawtimber, veneer and plywood. In particular, the government actively promoted the expansion of plywood production because the average export value of
Plywood is higher than other wood products (Tachibana, 2000). From 1990 to 1992, the number of plywood mills increased 290 percent from 10 to 39 and further grew by 39 percent to 54 mills by 2002. Likewise, plywood production increased 280 percent from 232,688 m³ in 1990 to 886,413 m³ in 1992, and further grew 270 percent to 3,279,933 m³ in 2002 (Sarawak Timber Industry Development Corporation).

Table 1 shows the export earnings of major timber products in 2004 and in 2008. It is evident that logs and semi-finished timber products (i.e. sawntimber, veneer and plywood) were the major contributors to Sarawak’s total export earnings from the timber sector.

<table>
<thead>
<tr>
<th>Wood Products</th>
<th>2008 (RM)</th>
<th>% of total</th>
<th>2004 (RM)</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logs</td>
<td>1,678,424,303</td>
<td>21.7</td>
<td>1,684,822,480</td>
<td>24.6</td>
</tr>
<tr>
<td>Sawntimber</td>
<td>960,357,664</td>
<td>12.4</td>
<td>851,897,765</td>
<td>12.4</td>
</tr>
<tr>
<td>Plywood</td>
<td>4,447,093,691</td>
<td>57.5</td>
<td>3,781,447,767</td>
<td>55.2</td>
</tr>
<tr>
<td>Veneer</td>
<td>296,784,263</td>
<td>3.8</td>
<td>222,699,975</td>
<td>3.2</td>
</tr>
<tr>
<td>Fibreboard</td>
<td>213,746,663</td>
<td>2.8</td>
<td>144,093,674</td>
<td>2.1</td>
</tr>
<tr>
<td>Mouldings</td>
<td>47,054,568</td>
<td>0.6</td>
<td>96,226,180</td>
<td>1.4</td>
</tr>
<tr>
<td>Particleboard</td>
<td>59,446,216</td>
<td>0.8</td>
<td>37,021,650</td>
<td>0.5</td>
</tr>
<tr>
<td>Furniture</td>
<td>27,815,841</td>
<td>0.36</td>
<td>34,310,708</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>7,730,723,209</td>
<td></td>
<td>6,852,520,199</td>
<td></td>
</tr>
</tbody>
</table>

Source: Malaysia Timber Industry Board

In contrast, export earnings from tertiary wood-processing industries, namely, fibreboard, particleboard, mouldings and furniture were small. During the five-year period, average export earnings from tertiary wood products, as a fraction of total export earnings totaled a mere 4.67 percent. In particular, export earnings from furniture made up only 0.52 percent. The statistics clearly imply that the forestry sector has not progressed significantly beyond secondary wood-processing since the 1990s.

The Sarawak Furniture Industry Association (SFIA) estimated that 600 companies are currently engaged in furniture manufacturing, employing 25,000 workers. These comprise predominantly small and medium-sized enterprises. In 2009, 395 mills were registered with Sarawak Timber Industry Development Corporation (STIDC), the principle regulating agency of timber-processing industries in the state. These mills engage in the manufacturing of furniture and furniture parts, as well as woodworking. However, not all mills are in active production. In a recent study commissioned by the International Timber Trade Organization (ITTO), Norini et al. (2009) estimated that only 103 furniture mills (only 26% of the total) in the state were in active production.

The registered mills are located mainly in major urban population areas with strong local demand for furniture products, ready supply of manpower and close proximity to upstream wood-processing industries. In Norini et al. (2009)’s sample of 78 active wooden furniture mills in Sarawak, 97.4 percent of the mills were found oriented towards the domestic market. These mills specialize in producing kitchen & bedroom furniture and door &door frames.

Sarawak’s wooden furniture export earnings were derived solely from the export of tropical hardwood garden furniture. In 2008, the main export markets for Sarawak’s garden furniture were within the Asia Pacific region (RM21.09 million), where Japan comprised the largest market (RM19.95 million). This was followed by the European Union (RM3.49 million) and South East Asia (RM1.99 million).
Empirical Findings:

Furniture manufacturing in Sarawak remains to a large extent, a cottage industry, with majority of operations being small-scale, labor oriented, low-skilled and home-based. Manufacturers tend to employ family members, rely on personal savings for operational capital and utilize obsolete technology. Only a few medium-sized manufacturers are equipped with dedicated automatic production facilities and specialized machines.

In this paper, we discuss the key challenges faced by the furniture manufacturers in Sarawak using Porter (1990)’s Diamond of National Advantage analytical framework. The framework describes four primary determinants of a nation’s comparative advantage vis-à-vis other countries in a given industry. These are factor conditions, related and supporting industries, demand conditions, and firm strategy. It is of interest that government and chance also plays an important role in influencing the competitive position of a nation. Porter’s hypothesis is therefore extended in this paper (see Figure 1).

Factor Input Conditions:

Factor conditions concern a nation’s endowment and relative productivity of factors of production, such as land, labor and capital. In addition to these traditional factors, industry competitiveness is also influenced by the presence of latent factor inputs such as technology, infrastructure, managerial capability and public amenities.

Shortage of timber supplies. Furniture manufacturers face a shortage of high quality timber materials in the domestic market. Although Sarawak is currently one of the world’s largest producers of tropical timber and timber products, majority of the raw logs and semi-finished timber products such as sawntimber, veneer and plywood are exported to Japan, South Korea and China. Timber products fetch higher prices in foreign markets, as compared to domestic markets. Consequently, most of the timber supplies in the domestic market comprise of lower-grade timber that does not meet export-quality standards. This has been detrimental to the growth of the local furniture manufacturing industry as furniture manufacturers have to deal with supply shortages (i.e. due to competition with foreign timber buyers) and lower-quality materials.

Higher transportation costs. Furniture manufacturers in the state also incur higher transportation cost due to the state’s geographical location and small population. It is estimated that 60 percent of cargo shipments to and from Sarawak are through Port Klang (in Selangor) while the remainder are through Port Keppel (in Singapore) and Port Tanjung Pelepas (in Johor). Recent increase in freight rate for shipment ex. Port Klang to European countries, from US$600 in June 2009 to US$2,700 in December 2009 (increase by 350 percent) and upward to US$3,200 by March 2010 (increase by 18.5 percent), have drastically increase the cost of transportation, thus hampering the export competitiveness of manufacturers in Sarawak (Wong and Ngui, 2009).
The cost of importing furniture parts from Peninsular Malaysia to Sarawak also contributes to higher production cost. The large trade deficit between Sarawak and West Malaysia has resulted in high numbers of empty containers from Peninsular Malaysia returning empty. To reimburse the cost of shipping empty containers; shipping companies impose heavy surcharges on containers to Sarawak. A recent estimation found that the average cost of transporting a 20-foot container of general cargo from Port Klang to Kuching was 78 percent more than the cost of transporting one from Kuching to Port Klang (Wong and Ngui 2009).

Higher electricity costs. Manufacturers in Sarawak also incur higher electricity costs as they are required to contribute to the cost of setting up the infrastructure for connecting manufacturing facilities to the nearest electricity network. In Peninsular Malaysia, such infrastructure is well-established; hence, manufacturers incur significantly lower connection costs than those in Sarawak. It is estimated that the cost of electricity connection in Sarawak is ten times higher than the cost in Peninsular Malaysia (New Sabah Times, March 18, 2010).

Shortage of Skilled Manpower. Furniture manufacturing is labor-intensive. The industry in Sarawak faces a shortage of skilled local artisan due to high turnover and the absence of a rich artisanal woodworking tradition. Furniture manufacturers used to hire unskilled workers earlier and train them training on-the-job in order to fill the skill gap. But, these workers often shift to other higher-paying jobs after acquiring basic woodworking skills. Therefore, local furniture manufacturers now are shifting their production to generic furniture as it does not require high levels of woodworking skills. A few of the existing furniture manufacturers engage skilled woodworkers from Kalimantan, Indonesia for producing more elaborate furniture pieces, particularly those that involve woodcarvings.

Difficulty in securing financing. Small and medium sized furniture manufacturers face difficulties in securing financial loans from local and foreign banks due to a host of issues such as the lack of collaterals (due to fear of non-performing loans, banks assign greater importance to the value of collaterals in making a loan decision), lack of resources, and the preference of banks to grant loans to bigger firms. With limited asset value, many SMEs were unable to acquire bank loans (Urata 2004). Urata (2004) noted that the cost of processing loan application is more or less the same regardless of the size of the loan; the financial institutions therefore attach greater weight to the loan requested by large firms because larger loans are more profitable. The lack of transparency concerning SMEs managerial and financial situations further hinders the provision of loan to SMEs. Urata (2004) also added that many innovative SMEs, particularly those at the start-up phase, are not able to get loans because financial institutions lack the capability of evaluating their business potential appropriately.

Related and Supporting Industries:

The presence of related and supporting industries is critical for assisting firms in maintaining and improving their production processes (Shaffer, Deller, & Marcouiller 2004). The supply chain in furniture manufacturing in Sarawak is poorly integrated. There are few furniture component parts manufacturers in Sarawak, hence, most component parts are either imported from Peninsular Malaysia and other neighboring countries, or produced in-house by furniture manufacturers.

A furniture manufacturer that requires sawntimber may need to deal with different suppliers at different stages of production, from purchase of sawntimber to drying, moulding and actual production. Consequently, the lead time from placement of order for sawntimber to roll-out of finished product on an average takes up to six months.

Demand Conditions:

Demand conditions include proximity of markets, size and growth potential, as well as nature of demand
(i.e. buyer sophistication). Ratnasingam (2003) noted that in developed countries, furniture has increasingly become a fashion statement and household identity. The typical life-cycle of furniture has also shortened as consumers seek to keep up with the latest trend.

The furniture manufacturing industry in Sarawak is oriented towards the domestic market. The growth potential of the industry is constrained by the small population of Sarawak and low per capita income. In 2007, the mean monthly gross household income of Sarawak was RM3,349. The corresponding amount of income in more populous and developed states such as Selangor, Penang and Johor are RM5,580, RM4,004 and RM3,457 respectively (Economic Planning Unit, Prime Minister Department).

Domestic consumers tend to prefer simple utilitarian furniture designs and low price. Willingness to pay a premium for aesthetics, workmanship and higher quality timber materials is low. Consequently, cheaper priced imported rubberwood furniture dominates the domestic market. The demand for furniture made from more expensive Sarawak hardwood timber specie is limited to custom-made pieces.

**Firm Strategy:**

*Low manufacturing and process technology.* Small and medium sized furniture manufacturers lack sufficient capital and scale economies to adopt new manufacturing technologies. According to Wong (2009), most manufacturers utilize intermediate-level technology or partially mechanized method of production. In comparison, export-oriented furniture manufacturers in Peninsular Malaysia are known to use more advanced production technology such as computer-aided design, e-commerce, computer-aided manufacturing and enterprise resource planning to enhance both productivity and efficiency of operations.

*Low factor productivity.* Ratnasingam (2003) noted that in spite of Malaysia’s large furniture manufacturing base, level of value addition achieved is not comparable to that achieved by the more established furniture manufacturing nations such as Italy, United States and Germany. Although labor and raw material costs are significantly higher in these countries, furniture manufacturers possess strong capabilities in supply chain management, technical skill development and utilization of advanced manufacturing technologies. The furniture manufacturing in Malaysia as a whole is still characterized by a heavy reliance on low or semi-skilled labor and utilization of aged technology. These in turn, contributed to low industrial and labor productivity.

The amounts of gross value of output, cost of input and value added of Sarawak’s furniture production during the time period from 1993 to 2005 are reported in Table 2, while Figure 2 illustrates the growth trend. The trend of yearly input and output figures indicate that furniture production in Sarawak has increased over the years. However, when the amount of value added is considered, the trend shows that the amount peaked in 2002, and from 2003 to 2005, it has declined. This implies that the rise in value of gross output was due to the utilization of more raw materials rather than a rise in productivity gains.

**Role of Government:**

Development of the furniture manufacturing industry requires favorable government policies and institutional support at all levels of the supply value chain. Under the Malaysian constitution, forest governance falls under the jurisdiction of the respective state governments (see Chiew 2009 for an extensive review of institutional framework governing the forestry sector in Malaysia). The state is therefore empowered to enact laws on forestry and to formulate forestry policies independently. In Sarawak, the Forest Policy 1954 provides the basis for forestry practices.
Table 2: Sarawak furniture production: gross value of output, cost of input and value added

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross value of output (in ‘000,000 RM)</th>
<th>Annual growth (%)</th>
<th>Cost of input (in ‘000,000 RM)</th>
<th>Annual growth (%)</th>
<th>Value added (in ‘000,000 RM)</th>
<th>Annual growth (%)</th>
<th>Productivity (Output/input)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>42</td>
<td>-</td>
<td>27</td>
<td>-</td>
<td>15</td>
<td>-</td>
<td>1.6</td>
</tr>
<tr>
<td>1994</td>
<td>38</td>
<td>-9.52</td>
<td>23</td>
<td>-14.81</td>
<td>15</td>
<td>0</td>
<td>1.7</td>
</tr>
<tr>
<td>1995</td>
<td>56</td>
<td>47.37</td>
<td>35</td>
<td>52.17</td>
<td>21</td>
<td>40</td>
<td>1.6</td>
</tr>
<tr>
<td>1996</td>
<td>63</td>
<td>12.5</td>
<td>38</td>
<td>8.57</td>
<td>25</td>
<td>19.05</td>
<td>1.7</td>
</tr>
<tr>
<td>1997</td>
<td>75</td>
<td>19.05</td>
<td>46</td>
<td>21.05</td>
<td>29</td>
<td>16</td>
<td>1.6</td>
</tr>
<tr>
<td>2000</td>
<td>136</td>
<td>81.33</td>
<td>87</td>
<td>89.13</td>
<td>49</td>
<td>68.97</td>
<td>1.6</td>
</tr>
<tr>
<td>2001</td>
<td>153</td>
<td>12.5</td>
<td>94</td>
<td>8.05</td>
<td>59</td>
<td>20.4</td>
<td>1.6</td>
</tr>
<tr>
<td>2002</td>
<td>177</td>
<td>15.69</td>
<td>112</td>
<td>19.15</td>
<td>65</td>
<td>10.17</td>
<td>1.6</td>
</tr>
<tr>
<td>2003</td>
<td>177</td>
<td>0</td>
<td>113</td>
<td>0.89</td>
<td>64</td>
<td>-1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>2004</td>
<td>159</td>
<td>-10.17</td>
<td>104</td>
<td>-7.96</td>
<td>55</td>
<td>-14.06</td>
<td>1.5</td>
</tr>
<tr>
<td>2005</td>
<td>182</td>
<td>14.47</td>
<td>145</td>
<td>39.42</td>
<td>37</td>
<td>-32.7</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Source: Department of Statistics Malaysia

Fig. 2: Growth trends in gross value of output, cost of input and value added

Source: Computed based on Table 2.

Cumbersome bureaucratic processes. A furniture manufacturer has to deal with at least seven different regulating agencies, each imposing different sets of regulations concerning issues that range across business licensing, material sourcing, wood processing, machinery, gas/chemical emission to waste disposal. Small manufacturers also face significant difficulties in obtaining a manufacturing license because they are required to purchase new machineries and redesign their production systems in order to comply with licensing criteria. Many small manufacturers could not afford the significant capital outlay as their savings and revenue are mainly used as operational capital.
Most furniture manufacturers also do not participate in developmental schemes that are offered by the government for assisting manufacturers in capacity building, market expansion and skill development. It is noted that the poor response is due in large to the long and complicated bureaucratic processes that a manufacturer would need to go through when applying to participate in such schemes. For instance, although the government provides low-interest loan facilities to manufacturers, the application process is deemed too long and only licensed manufacturers that meet stringent qualifying criteria are eligible to apply. Many of Sarawak’s furniture manufacturers are small family-operated businesses. They operate from the family’s residential premises and therefore are not able to neither apply for a manufacturing license from the Ministry of International Trade and Industry (MITI) nor register with STIDC. Consequently, they do not meet the criterion for participating in funding or developmental schemes, which require the possession of a valid manufacturing license.

Anti-tropical timber campaign. Anti-tropical timber campaigns in importing countries pose a significant threat to the export viability of Sarawak wooden furniture. The state’s forest management policies have long been criticized for promoting large-scale deforestation of natural tropical rainforest and displacement of ethnic minorities from logging concession areas. According to the International Tropical Timber Council (1990), an ITTO mission to Sarawak in late 1980s cautioned that the prevailing rate of forest utilization and management is not sustainable in the future. It pointed out that a major weakness “… in the structure of (Sarawak’s logging) concession system is the lack of synchronization between the length of the license period and the forest management cycle. The practice of issuing licenses for shorter than the felling cycles, without any guarantee of renewal, is not helpful to long-term management” (ITTC, 1990: 35). Instead, it only encourages licensee holders (i.e. logging companies) to harvest as much timber as possible within the license period.

Anti-tropical timber campaigns organized by non-governmental organizations (NGOs) have called for the boycott of tropical timber products, particularly among consumers in Europe and the United States. Most recently, the Norwegian Government Pension Fund sold off all its shares in a government-backed Sarawak timber conglomerate after the former’s Council of Ethics found that the company’s forest operations in Sarawak contributed to illegal logging and caused severe environmental damage (Reuters, August 23, 2010). This poses a serious threat to the export viability of the local furniture manufacturing industry as wood supplies are derived from the harvesting of natural tropical rainforests instead of plantations.

An increasing number of developed countries such as New Zealand, the Netherlands, Belgium and Australia have implemented public timber procurement policies, which require exporters to obtain chain of custody (CoC) certifications as a way to verify that their timber is harvested using sustainable forestry practices. Likewise, the European Union has introduced the Forest Law Enforcement, Governance and Trade (FLEGT) licensing system, which verifies and certifies the legality of timber products from exporting countries. Only licensed timber will be allowed access to EU markets. The present legal framework and regulatory system in Sarawak support the establishment of a CoC from log production through to local processors and log export points. However, the integrity of the CoC system may be questioned unless it is certified or supervised by international organizations such as the Forest Stewardship Council and the European Commission.

Conclusion and Policy Implications:

Strong demand and high export prices have perpetuated the preference for direct export of raw logs and low value-added timber products. Unlike Indonesia and Peninsular Malaysia which have banned the export of raw logs, the Sarawak government continues to allow timber companies to export 40 percent of their harvested logs. Likewise, the strong demand for semi-finished timber products from countries such as Japan, South Korea and China has encouraged manufacturers to concentrate on the production of veneer, sawntimber and plywood.
These industries require low levels of skills and generate faster return on investment. As a consequence, there exists little incentive for timber companies to either invest in tertiary wood-processing activities such as furniture manufacturing, or supply the domestic market which possess lower purchasing capability.

The literature on industry development offers contrasting views on the extent the government should intervene in the development of the furniture manufacturing industry. The ‘Neoliberal’ perspective argues that the government should confine its role to maintaining macroeconomic stability, establishing a regulatory system that promotes free trade, and providing essential public amenities such as education and infrastructure (Lall, 2003). These follow that decisions on resource allocation and choice of products to produce are best determined by market forces. However, the ‘Neoliberal’ perspective invariably promotes the perpetuation of low-skill, low value-added production of semi-finished timber products as Sarawak currently possesses comparative advantages in these industries.

The ‘Structuralist’ perspective on the hand, argues that government interventions are necessary in order to develop infant industries which may contribute to the long-term development of the economy. It is well documented that strong government intervention was fundamental to the rapid industrialization of South Korea, Singapore and Taiwan during the 1980s, followed by Malaysia, Indonesia and Thailand during the 1990s. In these economies, industrial policies favored the development of selected target industries. Governments not only channeled foreign direct investment and resources to the target industries, but also established public enterprises to invest in those industries. In short, the governments assumed the roles of both investor and regulator.

In light of the current challenges faced by the furniture manufacturing industry in Sarawak, policy makers are confronted with the question of the ideal policy initiatives that can be implemented in order to nurture the industry. On one hand, the government can adopt a neo-liberal approach by focusing on maintaining a sound regulatory framework and promoting macro-economic stability. These involve enhancing the efficiency and transparency of the regulating agencies within the timber sector, providing tariff and non-tariff incentives for investment in furniture manufacturing and meeting the human capital needs of the industry. The government can also provide subsidy for research and development and facilitate the transfer of manufacturing and marketing know-how from well-established furniture manufacturers in Peninsular Malaysia. Consistent with the neo-liberal approach, decisions on type of furniture to produce, the technologies to be utilized and markets that the manufacturers should serve are left to industry players to decide.

On the other hand, the government can adopt a more interventionist role by involving directly in the supply chain, either as a supplier of input, as a co-producer or as an intermediary between producers and markets. As supply shortages have been highlighted as the main problem faced by furniture manufacturers, the government can introduce an export quota policy that requires a specific portion of semi-finished timber products to be channeled to the furniture manufacturing industry. Alternatively, the government can provide financial assistance, in the form of low-interest loans to furniture manufacturers for securing supplies at market prices (i.e. competing against foreign buyers). Moreover, the government can form joint ventures with foreign investors in setting up large-scale export-oriented furniture manufacturing in Sarawak. These would foster the development of the supporting industries by creating opportunities for local furniture manufacturers to produce and supply furniture parts or services to the large manufacturer.

At present, there are no longitudinal studies on the development of tertiary wood-processing industries. This reflects the dominance of secondary downstream industries such as plywood manufacturing and relative ease of obtaining official data for these industries. More research is needed to furnish empirical evidence of how policy preference for these industries has impacted the growth of wooden furniture manufacturing. A further knowledge gap concerns the development of industry clusters within the forestry sector. Future research can focus on effectiveness of existing inter-firm linkages in supporting wooden furniture manufacturing, as well as
the types of institutional arrangement that are needed for fostering the industry. In the field of marketing, further research on the branding of wooden furniture from Sarawak can benefit initiatives to promote own-brand manufacturing. To facilitate Sarawak manufacturers in exporting their furniture products, researchers can examine their participation in export-promotion assistance programs that are offered by the government.

REFERENCES
