

**Author(s):** Kathleen Ludewig, 2010

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## SI 657 Week 5

Kathleen Ludewig

Reading Notes – P. Brimble and R. Doner, “University-Industry Linkages and Economic Development: The Case of Thailand,” *World Development* 35:6 (2007), pp 1021-1036.

### **Key Points**

Thailand’s economic growth over the last several decades is attributed to its natural resources, cheap labor, robust macroeconomic policy, and strong infrastructure. The rise of the Chinese textile industry and the move to JIT (just in time) production has decreased Thailand’s competitiveness. The Thai government has realized that these advantages, especially the cheap labor one, are not sustainable.

UIL in Thailand has been weak until now due to lack of support from both the private sector and the Thai government. Firms had little interest in R & D. Thai bureaucracy did little to encourage existing UILs.

In 2005, the World Bank released a report, which revealed

1. There was a skills shortage among Thai firms
2. Tertiary graduates were paid extremely high salaries/premiums
3. Thailand has fewer secondary grads than other comparable countries
4. The skills of Thai secondary grads are lower than other comparable countries
5. Half of the Thai firms said their employee’s IT skills were very poor

UILs have spillover effects – if firms only did in-house training it wouldn’t improve the industry as a whole. Three relevant goals of the education sector related to entrepreneurship and innovation are:

1. Training and education
2. Provision of services; consulting
3. Research

Table 1 on page 1024 provides a summary of these goals can be mapped to industry activities.

They include visiting lectures from industry, direct or indirect investments, testing and repair services, formal partnerships, and shared equipment.

In response, the Thai national innovation system (NIS) has targeted university-industry linkages (UIL) in four key industries:

1. Automotive – e.g. there’s an automotive center for R&D at one university which is sponsored by Toyota
2. Textiles-garments – e.g. Thailand Institute has 66 initiatives from supply chain to fabric design; some have explicit linkages to universities, e.g. Ford and Thai technical colleges works on an automotive certification program
3. Agro-industry – e.g. R & D for the Thai sugar industry.
4. Electronics – e.g. Seagate has built long-term partnerships with universities; many other partnerships are done on a personal basis rather than formalized

The identifies several weaknesses in UL

1. lack of trust (personal connections rather than firms)
2. availability of outside R & D from MNCs
3. lack of cohesion within and among industries
4. few incentives for university participation
5. timeline - universities work on a quarter or semester basis and firms do not
6. government is not an effective coordinator b/c of too much bureaucracy

### **Connection to Other Readings**

Last week, we mapped out the board the key elements to a National Innovation system. Our map included matching labor demands with training. UIL is one method to do that.

Brimble mentions on multiple occasions that there has been few focused, government initiatives “to promote indigenous technological capacity” (1027). This relates to our small group discussions a couple weeks ago about taking a local approach to development and using a society’s unique cultural and skills to develop rather than a standard approach or an externally developed model (Escobar).