Selection of Targeted Industries for Myanmar Industrial Estate

Example for EE 459

(Case Analysis I)

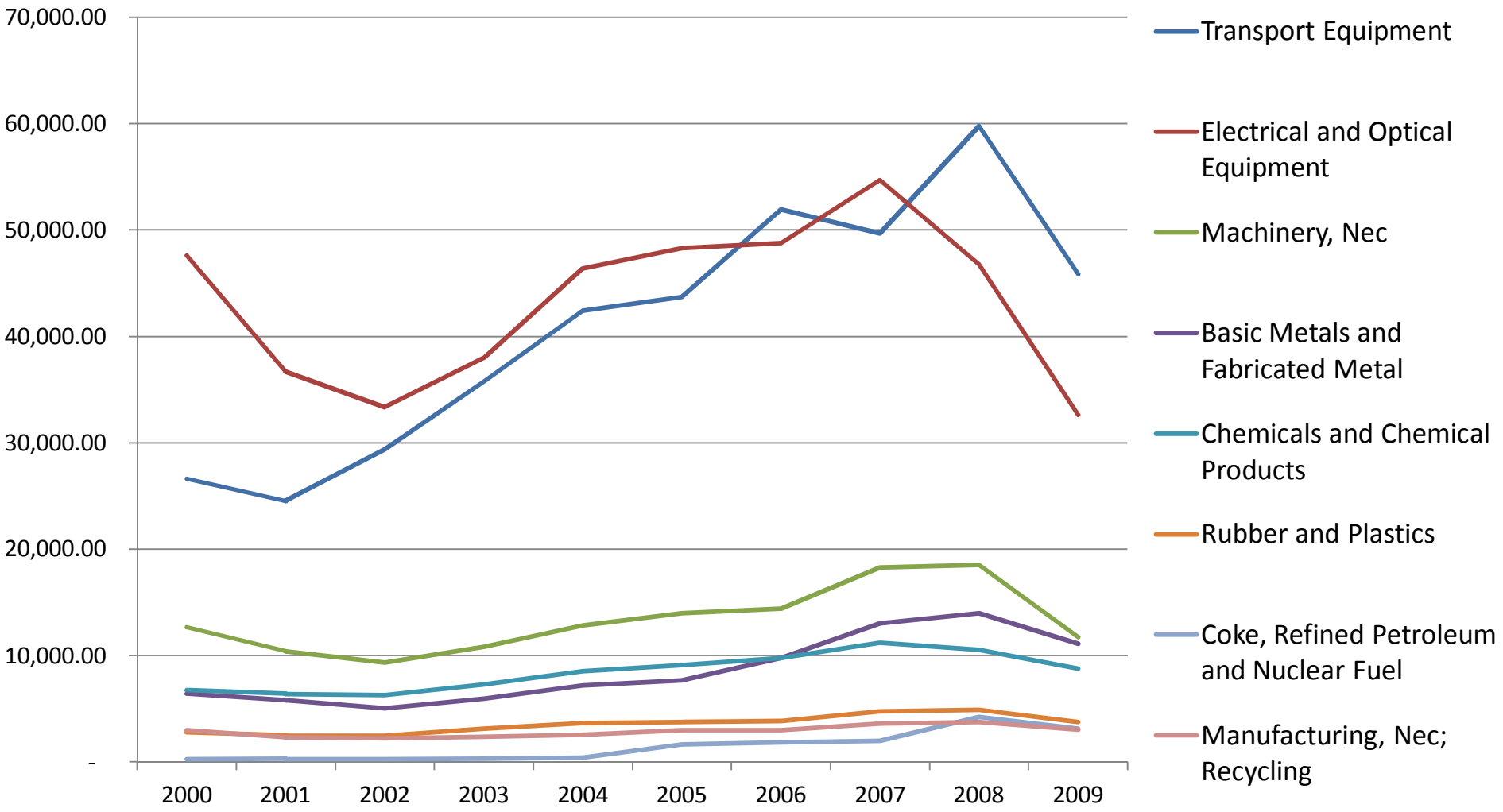
Introduction

Allocation of selected industries is based on key findings guided by empirical studies. Specifically, in this study, the global trade and production data of 2000 – 2009 developed by European Commission (EU) is the main source of numerical evidence. To concentrate on the characteristics of production network in Asia, the industrial data of Asian countries are used as the major information sources of industrial selection. Mainly concentrating on the economic-related factors, the selection of targeted industries is based on the following criteria:

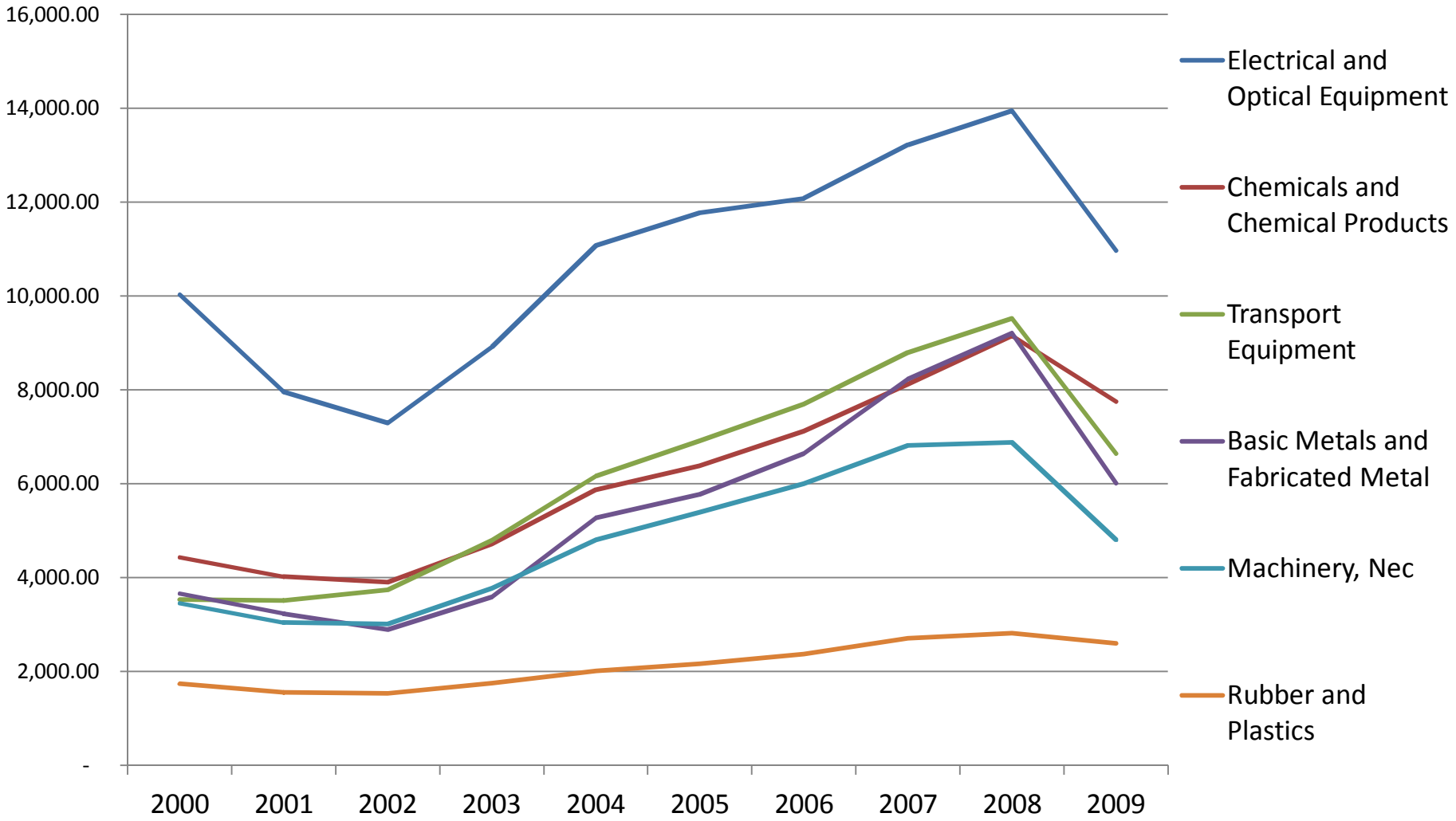
- Percentage share of GDP of each industry
- Economic multipliers of each industry

A combination of these criteria will provide substantial information regarding each industry's future trend and the magnitude of attractiveness. In addition, the result of this computation can be adapted to the land allocation for industrial zones of this project.

Trade Value of East Asia's Export to EU



Trade Value of EU's Export to East Asia



Criteria of Industry Selection

(I) Sectoral Output's Percentage share of GDP and its output growth

To explore the degree of significance of a particular in the economy, the percentage share of industry's output per GDP is generally accepted that it is the most comprehensive indicator.

By employing the global trade and production data of 2000 – 2009 published by European Commission (EU), the average percentage share of industry's output per GDP and its average annual growth of production are calculated and their graphical representation are formulated as shown on FIGURE 1.

Particularly this scattered plot graphically indentifies the attractiveness of industries. Those production sectors located on the top-right area of the chart represents the combination of both fast growing and yielding significant contribution to the economy. On the other hand, industries located on the bottom-right zone are those small and shrinking production activities.

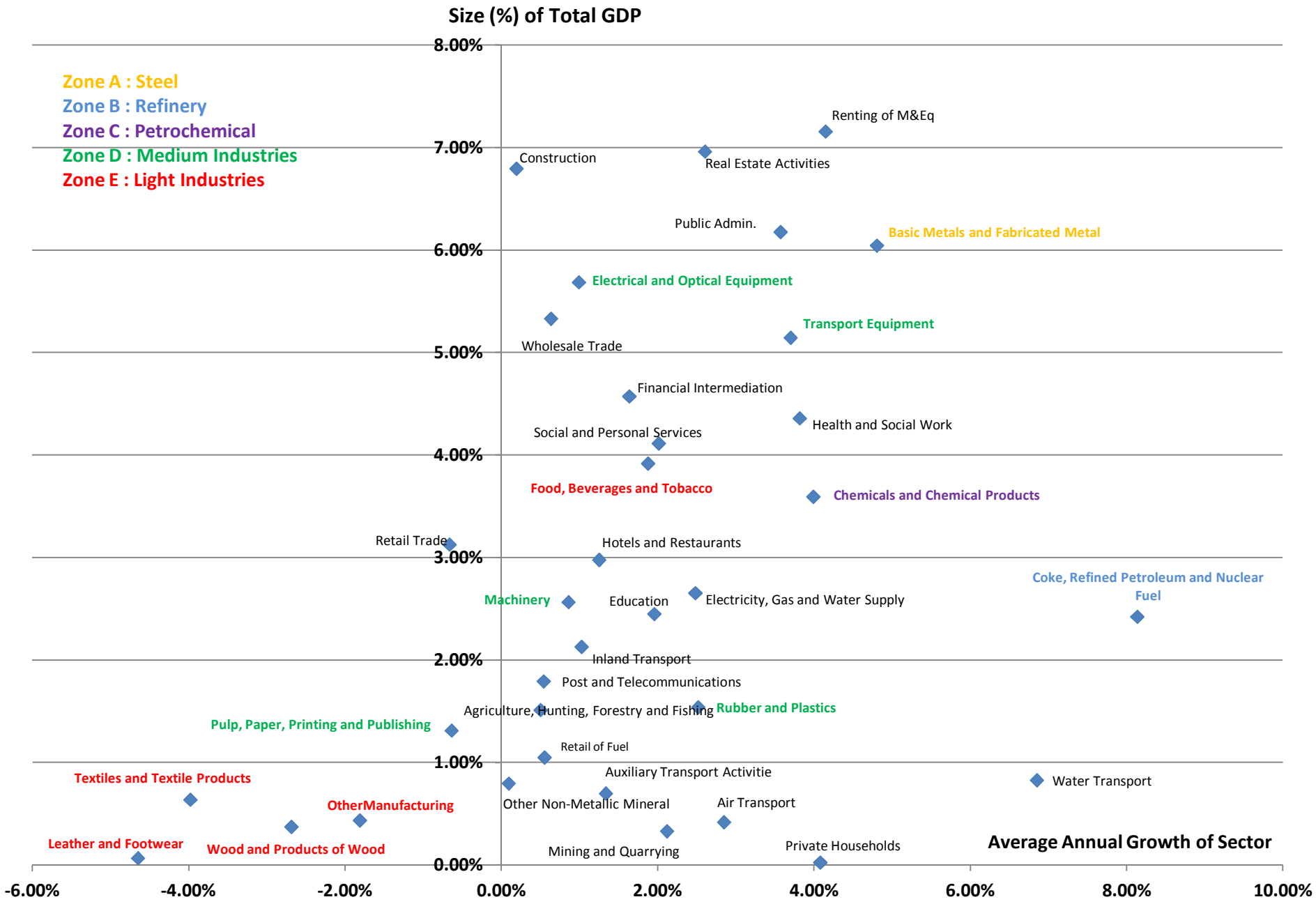


FIGURE 1: Sectoral Share of GDP and Annual Growth

Criteria of Industry Selection

- By matching results obtained from this calculation and classification, it is found that most of industries located in Zone A – D have a significant degree of economic contribution and potential of market expansion.
- Although most industries in Zone E are located in the bottom-left zone, the large supply of labor, low wage and availability of local raw materials in Myanmar would compensate the disadvantage of slow growth of those industries, and these would indeed attract investors to reallocate factories of these industries to Dawei.

Criteria of Industry Selection

(II) Economic Multipliers

Based on the theory of backward and forward multipliers, the value-chain type of interconnection of a particular industry can create the spill-over effect that leads to the production expansion of other related industries and also increasing employment.

The backward multiplier represents the total expansion originating at a particular industry which runs through its upstream industries (e.g. raw material suppliers, etc.). For example, industry A's value of backward multiplier of 1.4 indicates that the 1 million US dollars expansion of industry A would lead to a total expansion of 1.4 million US dollars of upstream industries supplying raw materials to industry A.

Based on the similar concept, the forward multiplier represents the total expansion of downstream production activities related to a particular industry. For instance, industry A's value of forward multiplier of 1.25 specifies that the 1 million US dollars expansion of industry A would induce a total expansion of 1.25 million US dollars of the connected downstream industries (e.g. wholesale and retail traders, transportation companies etc.).

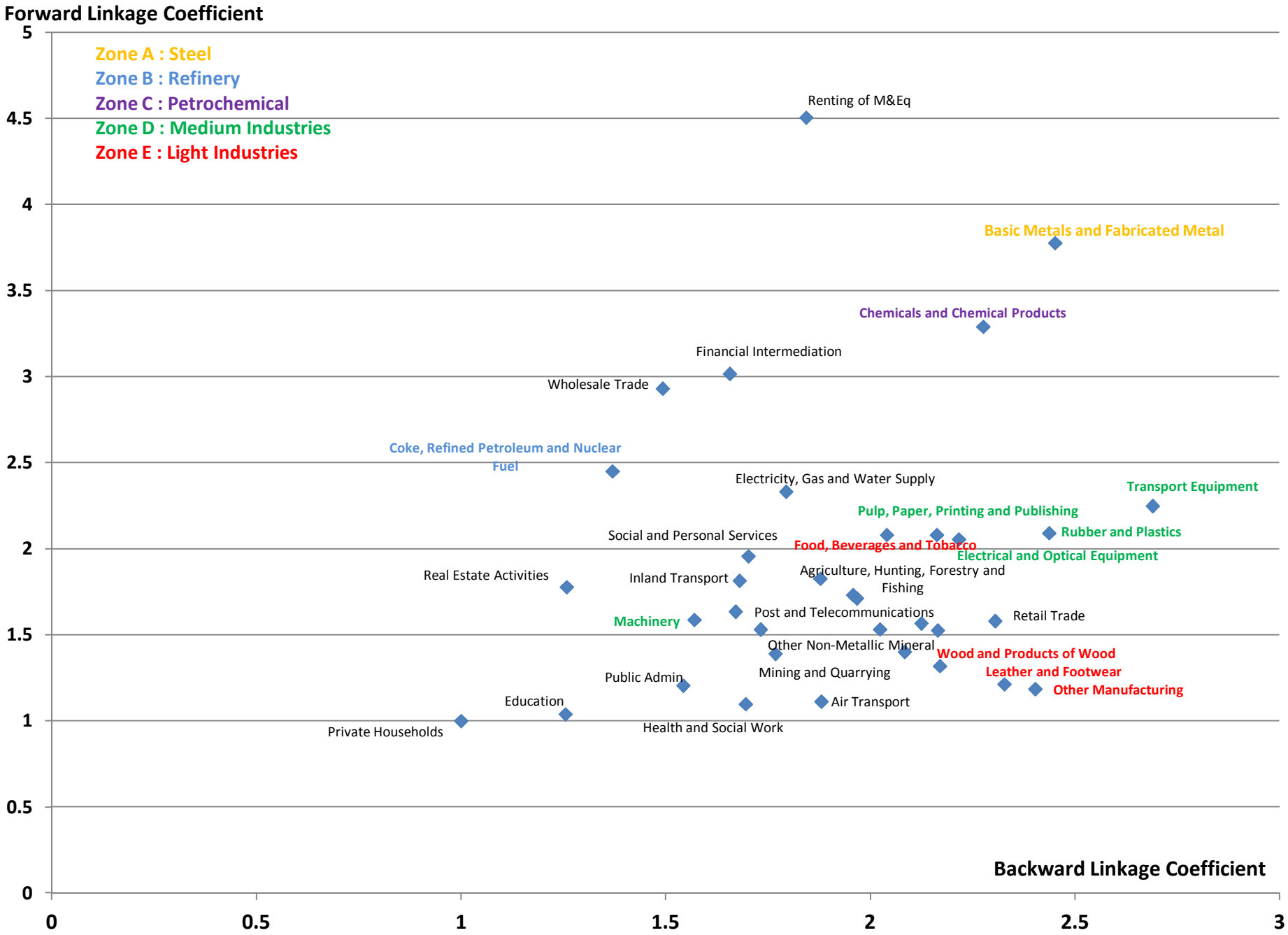


FIGURE 2: Coefficients of Backward and Forward Multipliers (average of 2000 – 2009)

Criteria of Industry Selection

- The combination both backward and forward multipliers represents the contribution of a particular industry to the production network, and eventually leading to the expansion of the economy.
- FIGURE 2 exhibits the computational result of these multipliers which indicate that most industries in Zone A – C would contribute substantial positive spillover effects to their downstream and upstream production networks.