Shipping and Global Trade

Abstract:

Usually, shipping industry plays a very positive role in the globalization process. The containernization and related technological improvement substantially reduce the transportation cost and facilitate the division world wide. However, the concern is also raised regarding to the increasing fuel cost and regulations which are aimed to reduce shipping emission and cure the externality. In the presentation, I use two models to predict these scenarios. First, assuming that in the short run, the profit of a ship is a function of shipping speed/fuel cost, I use an example to show how much it would cost by slowing down. Second, I use a model by Dr. Harley to predict the influence of fuel cost on freight rate. And then, I combine the two scenarios to get a rough estimate of additional cost for a 5000TEU containership from Shanghai to Los Angeles. Even though the conservative estimates are used, it is still amazing how much additional cost a ship must incur. If regulations become stricter and the fuel cost is higher, there might be negative impact on global trade and make U.S trade balance even worse. It would also lead to change of the supply chain of multinationals.