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The Benefits of Container Exchange between Carriers: A Case Study

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1. Introduction

The paper proposes that the container exchange mechanism is an effective solution to the container inventory imbalance problem. Drewry Shipping Consultants state that about 20% of total container flows at sea around the world are empty, and the costs of repositioning are about USD 400 per container [3]. There is a tremendous pressure on reducing logistics cost and carbon footprint. The fundamental reason for Container Inventory Imbalance (CII) is the external trade imbalance of countries. A major challenge revolves around repositioning of empty reusable containers [6]. It is noted that the exchange mechanism works well with respect to the shipping space (slots) that has proved immense benefits to carriers as well as to the industry in general. However, the carriers believe that there is no opportunity for container exchange as the intrinsic trade imbalance is commonly applicable to all carriers. The industry has not made any attempt to evaluate the benefits of container exchange due to this myopic view.

2. Container Exchange

Many service agreements between carriers already have provisions to exchange containers in addition to slot exchange between consortium partners. However, the fact remains that there is no exchange of containers taking place in reality. This is mainly due to the lack of initiatives by shipping agents and it is quite a paradox as carriers regularly spend considerable amount of money on container re-positioning. Shipping companies spend in average USD 110 billion per year in management of their container fleets (purchase, maintenance and repairs) of which USD 16 billion is for the repositioning of empties [5]. If few leading lines take the initiative and exchange containers wherever possible, the rest may follow suit [4].

3. Analysis

Given the dispersed international nature of shipping business it is rather difficult to evaluate this phenomenon on a truly global scale. Therefore, the study was