A shortage of seafarer officers? Evidence from Filipino seafarer statistics

According to the BIMCO/ICS Manpower Report, the global supply of seafarers in 2015 was approximately at 1,647,500, including 774,000 officers and 873,500 ratings. The Report also estimated that the global demand for officers in the same year stood at 790,500, indicating a shortage of 16,500 officers.

Without any doubt, it is challenging to survey a fluid and diverse workforce on a global scale. BIMCO/ICS achieves unparalleled breadth covering the worldwide supply and demand for seafarers. In terms of depth, however, there is room for improvement as it is not able to provide accurate and detailed data on each seafaring labour supply country.

One source of inaccuracy is related to the situation that the number of seafarers is notoriously difficult to estimate. The maritime authorities may have accurate data on the total number of people who hold a valid seafarer certificate at any given time. However, they have little idea of how many of them are still active seafarers (i.e. those who are working, or intending to find employment, at sea) or how many have left the profession or retired. Given this challenge, it is highly improbable for the BIMCO/ICS surveyors to have an accurate estimation of the supply of seafarers as they rely on the figures provided by national maritime authorities.

Nevertheless, without knowing the exact number of active seafarers, it is still possible to figure out the supply/demand balance situation by analysing and triangulating different sets of data released by national maritime authorities. This article examines the data released by Filipino maritime authorities and revisits the officer shortage claim.

Deployment statistics

In the Philippines, the Philippine Overseas Employment Administration (POEA) processes overseas employment of Filipino seafarers and issues an overseas employment certificate to each seafarer deployed overseas. As this is a prerequisite, the information collated by POEA should represent an accurate picture of the demand for Filipino seafarers in the market. Table 1 shows the numbers of Filipino seafarers deployed internationally between 2010 and 2017 as collated and released by POEA. This data clearly indicates that the Manpower Report significantly underestimated the supply of Filipino seafarer officers. While the Manpower Report estimated a supply of 72,500 Filipino seafaring officers in 2015, in reality, a total number of 93,992 Filipino officers were deployed in that year (21,492 more than the BIMCO/ISF estimation). Were these extra Filipino 21,492 officers alone taken into account, the shortage of 16,500 officers as indicated in the Manpower Report would change to an oversupply of 4,992.
Table 1. Deployment of Filipino seafarers by categories 2010 – 17
(Source: POEA Overseas Employment Statistics)

It is worth noting that Table 1 shows deployment figures, and that deployment is not the same as supply. There are three scenarios. First, when the supply and demand are in balance, the number of deployments equals that of supply as well as that of demand. Second, when there is a shortage in supply, all the supply would be deployed; and in this case the supply would be the same as the deployment. In the third scenario when there is an oversupply, however, the number of deployments reflects the actual demand; as the demand is limited, the total supply would be more than the number of deployments.

CoC examination statistics

To find out which scenario Filipino officers are in, it is necessary to bring in the second set of data, Filipino marine officer Certificate of Competency (CoC) examination statistics released by the Maritime Industry Authority (MARINA) of the Philippines. Table 2 shows that from 2015 to 2017, a total number of 21,246 Filipino seafarers acquired an Officer in Charge of Navigational Watch (OIC-NW) CoC and another 12,650 obtained an Officer in Charge of an Engineering Watch (OIC-EW) CoC. These were new blood into the supply of officers. They would be deployed 1) to fill officer positions newly created, and 2) to replace those who retire or leave the profession. To estimate how many of these newly certified were deployed, the equation below can be applied:

Assuming the supply and demand for officers in Year (n-1) is in balance:

No. of newly deployed officers in Year n = No. of deployed officers in Year n – No. of deployed officers in Year (n-1) + Attrition rate x No. of deployed officers in Year (n-1)

Table 2. Number of Filipino marine officer CoC examination passers 2015-17
(Source: MARINA statistics)

Assuming that the annual attrition rate is three percent (BIMCO/ICS estimated the rate at around 2.3-2.4 percent), the numbers of newly deployed officers in 2015, 2016, and 2017
would be 3,117, 9,433, and 2,599 respectively (based on the figures in Table 1). Thus in the three years, the overall demand for new officers was 15,149, but the number of newly certified amounted to 33,896. This indicates an accumulative oversupply of 18,747 officers (more than 55 percent of the newly certified) by 2017, based on the assumption that the demand and supply were in balance in 2014. When more than half of the newly certified officers were not deployed as officers between 2015 and 2017, however, it was likely to be the case that a large proportion of Filipino newly certified officers were in a similar situation before and in 2014. Those unlucky seafarers were likely to be employed as ratings, though holding CoCs.

The figures of oversupply of Filipino officers are staggering. Though not officially released by the POEA, The Manila Times reported that Filipino seafarer deployment in 2018 hit 337,502, decreased by 111,961 compared with the 2017 figure of 449,463. Even though a separate figure of officer deployment was not provided, it is reasonable to assume that tens and thousands of Filipino officers lost employment in 2018. This further added to the problem of oversupply.

The oversupply calculated above is only about Filipino officers. However, the seafarer labour market is a global one into which Filipino seafarers have long been well integrated. If there were a shortage elsewhere in the world, it would be unlikely that ship managers fail to notice the abundant supply of Filipino officers. Therefore, the demand/supply situation of Filipino officers reflects that of the officers globally.

**Cadet training statistics**

When BIMCO/ICS reported a shortage of officers, it was perceived that recruitment was a problem. Regarding Filipino seafarers, however, this is not an issue. Table 3 shows that a large number of students enrolled in Bachelor of Science in Marine Transportation (BSMT) and Bachelor of Science in Marine Engineering (BSMarT) programmes for deck and engine cadet training in the Philippines. On average, the number of enrolled students each year during the 2011-15 period was about 160,000. As the degree courses take four years to complete, the newly enrolled per year would be more than 40,000. However, it is reported that less than 20 percent of them were able to complete their training. One major reason for this was that they could not secure a training berth for shipboard training. Thus, at the training stage, a severe lack of demand has prematurely terminated the seafaring aspirations of a large number of students, and this also means that a large amount of resources is wasted.

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<td>139,638</td>
<td>184,104</td>
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Table 3. Number of enrolled MET students in the Philippines 2011-15.

(Source: MARINA statistics)
Conclusion and recommendations

The analyses of Filipino seafarers’ certification, deployment, and training statistical data indicate that there is no shortage of officers (at the operational level). Instead, there is a problem of oversupply – tens and thousands of certified Filipino officers could not find employment as officers. At the same time, about 10,000 Filipino seafarers obtain their first CoC each year, but more than half of them would find it difficult to secure an officer position. Furthermore, more than 40,000 new cadets were recruited each year and only a small proportion of them could complete the training. Since Filipino seafarers have long been integrated into the global labour market, it is highly unlikely that while there is a serious oversupply of officers in the Philippines, there is a shortage in the global market.

Thus, the officer shortage claim is misleading. It has been seen by labour supplying countries as an opportunity to expand seafarer cadet recruitment and training capacities. However, resources are limited; and in the context of an oversupply, focusing on quality is much wiser and more effective than spreading investments and efforts thinly to strive for quantity. This is especially the case in countries where training quality is wanting. Improved quality makes officers more competent and competitive in the labour market. This is beneficial not only to the specific nation but also to the whole industry in terms of developing human resources.

Since there are no effective means to sift out non-active seafarers from the registered, it remains a huge challenge to estimate the supply and demand for seafarers at a global level accurately. However, as a few major seafarer labour supplying countries provide detailed statistical data on seafarer deployment, certification, and training, it is possible to triangulate these sets of data to figure out the supply and demand situation at a national level. This information in turn can shed light on the global situation because the labour market is a global one. Therefore, the accuracy of future BIMCO/ICS manpower survey results can be improved by conducting a few complementary in-depth case studies focusing on the major labour supplying countries in addition to the conventional and broad global survey.