Are China's "Sea Turtles" Becoming "Seaweed"? A Changing Job Market

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Abstract
Analysts of China's "reverse migration" largely ignore returning, short-term MA students, who comprise close to 70 percent of all returnees, seeing them as less significant. Drawing on surveys of the past 15 years, this article makes four points: The share of returned MAs in the domestic job market is huge; MAs who plan their overseas sojourn well, succeed after coming home; returning because of "family" issues is problematic; and a 20 percent "wage premium" for an overseas MA persists.

Analysts of "reverse migration" emphasize the importance of talented people with a foreign PhD, who engage in cutting-edge research that enhances national power. But what of the millions who go abroad for a short-term master degree?

Compared with Chinese overseas students who are funded by the state, self-paying master students (MAs) are generally regarded as less capable. While returnees with advanced degrees are called "*hai gui*," or "returning sea turtles," people returning from "overseas" (*hai*) who are "waiting" (*dai*) for employment were first labelled in 2005 as "*hai dai*," a homonym for "seaweed." Were glorious "sea turtles" morphing into inglorious "seaweed?" The growth in the "saturation rate of MAs"—the number of returned MAs divided by the number of returned MAs + the number of domestic MAs—suggests that such a process may be underway. In 2011, the saturation rate of MAs was 27.2 percent; it jumped to 36 percent in 2012, and reached 45 percent by 2017, with 480,900 returned postgraduate students joining 578,045 local graduates in the job market. Even if these young people shift away from the United States as a result of an inhospitable environment due to politics and COVID-19, their share of reverse migration is likely to remain quite high.

The reverse flow of MAs since 2005 has led educators, policy makers, and journalists to ask if China was generating a glut of "seaweed" that would fill the ranks of disgruntled wage earners or unemployed at home. Still, in a 2007 paper, Han Donglin (Renmin University) and Zweig argued that concerns about "seaweed" were overstated, as 70 percent of returnees found a job within three months, while 90 percent were employed within six months. We also found a large "wage premium," relative to local graduates.

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This article draws on several surveys. Three, carried out in 2006 by the ministry of education, yielded responses from returnees from Japan, Canada, and Hong Kong. A national survey, also in 2006, allowed Zweig to compare local MAs with the aforementioned returned MAs. A survey in 2016 on a website for single returnees looking for other returnees, yielded a further data set. In 2016, Zhaopin, a Chinese headhunter, received 1,589 usable responses on its website to a questionnaire composed with the Center on China and Globalization. Finally, drawing on the 2015 China Household Finance Survey conducted by the Southwestern University of Finance and Economics, Du *et al.* compared 482 locally trained and 482 returned graduate students by matching pairs with similar backgrounds.

Why Did Students Return? "Push," "Pull," or Family?

To assess why students returned, Zweig flipped the "push-pull" perspective used to analyze brain drain to see whether "failing" or being "pushed out" from the West, or being "pulled" home by opportunities, affected their return. Zweig also included the option of returning for "family," and then tested these three explanations on seven outcomes, including (1) length of job search, (2) level of work satisfaction, (3) life satisfaction after returning, (4) a comparison of the benefits and costs of overseas study, (5) estimates of the time it would take to recuperate those costs, (6) actual income, and (7) estimated income.

An interesting paradox was found among respondents to Zhaopin's 2016 survey. On a positive note, using only variables significant at the .05 level, those who were "pulled" back took less time to find a job, enjoyed better work and life satisfaction, saw the benefits of going abroad as greater than the costs, and earned higher incomes. Those

"pushed out" from overseas, and felt compelled to return, faced difficulties only in "recouping their costs." However, those who returned for "family" took more time to find a job and recoup the costs of going abroad, and they had negative scores in "work" and "life satisfaction." The message, then, to youth in this strongly family-oriented culture: "Don't go home to satisfy your parents or you will be miserable."

The 2016 Zhaopin data also portrays two groups of returnees: Those who "get it" and those who "don't." The former group succeed because they know the domestic market, plan out their careers, and develop a skill that the market needs. But some in the latter group go abroad because they cannot enter a good Chinese university, a problem that they compound by ignoring the needs of the domestic job market and engaging in poor career planning when picking what turns out to be the wrong majors to study abroad. These mediocre students who are "pushed back" to China are destined for mediocre careers back home, where, despite a lengthened job search, they are still dissatisfied with their job choices and easily morph into "seaweed."

Does Overseas Study Increase Returnees' Incomes?

Returnees' salaries in 2006 yielded a significant wage premium. Comparing the income of returnees from Japan, Hong Kong, and Canada with 6,000 urban residents from across China showed that returned MAs earned 83 percent more than locals with similar academic degrees.

However, parents' social class could override the income gains of studying abroad. Why say this? The regression model of the 2016 *Haigui Zhixin* survey found that an overseas degree increased a returnee's income significantly. However, when we introduced family income, and whether either parent had been an official, into the model, the impact of studying abroad is no longer statistically significant; instead, family income, and whether parents are officials, become significant. Thus, while going abroad could benefit many young people, it did not necessarily help the children of the elite.

The survey of 2014 analyzed by Du and his colleagues at SWUFE is even more definitive because of their "matching pair" analysis. The findings, significant at the .05 percent level, was that returnees with a graduate degree earn 19.3 percent more than locals with the same degree, while there are no income differences between returnees and locals with bachelor degrees. They also tested a "human capital" effect, which returnees got a higher salary because of their abilities, versus a "signaling effect," which employers paid them higher salaries simply because the returnee had studied abroad. Their finding, that the longer returnees work in a firm the larger the salary gap with locals, suggests that studying abroad pays dividends, in that higher salaries for returnees follow only after their employer finds them to be more productive.

As China maintains its transnational ties, foreigners should be comforted with the knowledge that the young professional with whom they are interacting—whether in a foreign or domestic company, an NGO, a university, or a government office—is likely to have had an overseas education. This group of talented individuals, though maligned as "seaweed," are the same people that will allow China to maintain its leading position as the preeminent member of the "developing world," and will, in their own way, contribute to China's rise and its deeper integration with the global system. ◢

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