

MERCATUS CENTER
GEORGE MASON UNIVERSITY

REGULATORY STUDIES PROGRAM

Public Interest Comment on

*Extending Period of Optional Practical Training by
17 Months for F-1 Nonimmigrant Students with STEM Degrees and
Expanding Cap-Gap Relief for All F-1 Students with Pending H-1B Petitions*¹

DHS Docket no., ICEB-2008-0002

The Regulatory Studies Program (RSP) of the Mercatus Center at George Mason University is dedicated to advancing knowledge of the impact of regulation on society. As part of its mission, RSP conducts careful and independent analyses employing contemporary economic scholarship to assess rulemaking proposals from the perspective of the public interest. Thus, this comment on the Department of Homeland Security's (DHS) Notice of Interim Final Rulemaking for Extending Period of Optional Practical Training by 17 Months for F-1 Nonimmigrant Students With STEM Degrees and Expanding Cap-Gap Relief for All F-1 Students With Pending H-1B Petitions does not represent the views of any particular affected party or special interest group, but is designed to evaluate the effect of the Department's proposals on overall consumer welfare.

I. Introduction

Optional Practical Training (OPT) allows students with an F1 non-immigrant visa status, who have studied in the United States for at least one full academic year, to remain in the US and to take employment in a field directly related to their area of study, without amending their visa status. During this time a student may apply for another visa.

If the student wishes to continue working in the US after OPT, he or she must seek another visa. Highly skilled migrants are entitled to apply for an H1-B visa. This is a non-immigrant work visa for persons with special skills, including but not limited to skills in a technical field. A non-immigrant may remain up to six years in H1-B status, during which time that person may seek full immigrant status, otherwise known as a green card.

Congress has capped the number of H1-B visas that may be issued at 65,000 per year. Individuals seeking to work for a non-profit or university are exempt, as are up to 20,000 individuals with a master's degree or higher from a US institution. In 2007 and 2008, the cap was reached on the first day of filing, putting pressure on universities to deliver grades before the deadline. The H1-B visas cannot be issued until six months after filing,

¹ Prepared by Mark Adams, graduate fellow, Mercatus Center at George Mason University. This comment is one in a series of Public Interest Comments from Mercatus Center's Regulatory Studies Program and does not represent an official position of George Mason University.

so students who miss the deadline the first time around face a four month “cap gap” when their 12 months of OPT expires.

DHS has issued an interim final rule extending OPT by 17 months, to a total of 29 months, for international students studying STEM (Science, Technology, Engineering and Math) subjects. The Department also seeks to bridge the cap gap by extending OPT for all students with eligible H1-B petitions.

Economic studies indicate that the proposed changes will generate significant benefits. Exports will increase, domestic students will benefit, and the productivity of US workers will likely increase, raising both wages and US competitiveness. However DHS’s decision to limit the application of the extension 17 month OPT extensions to STEM students will limit these benefits as it will harm US competitiveness in fields not covered by STEM, particularly the financial and general business sectors. DHS should therefore expand the rule to cover other the disciplines.

II. The Economic Literature

Benefits to US Economy

The US economy benefits directly from students coming to the United States. In 2006/07, international students spent \$14.5 billion on tuition and living expenses.² This export of educational services is equal to twice the total of US exports to Russia in 2007.³ Reports show that many students see the ability to work in the United States after graduation as a selling point for US universities.⁴ Schools blame current restrictions on students remaining in the US for the increasing number of international students who choose to study at home or at schools in Western Europe.

International student enrollment in the US fell 4% between 2002/03 and 2005/06. Despite increasing in 2006-07, it has yet to reach its earlier peak. International students as a percentage of total enrollment in US schools fell from 4.6% to 3.9% and has yet to show signs of recovery.⁵ The largest proportion of international students (17.8%) study business and management.

The Graduate Management Admission Council (GMAC) administers the GMAT test used by business schools in the US and some business schools in other countries. In 2005 the Council reported, “General interest in study within the United States has decreased for most regions of the world,” and the number of students from Central Asia “decreased dramatically”.⁶ A 2008 report noted that although total enrollments had recovered, driven by increased worldwide demand, the proportion of students taking the GMAT who chose

² “Open Doors,” Institute of International Education, Figure 7A (2007).

³ “Foreign Trade Statistics,” US Census Bureau.

⁴ Kristen Lease, “A Visa Squeeze for Foreign MBAs,” *Business Week* (May 2007).
http://www.businessweek.com/bschools/content/may2007/bs20070514_587413.htm.

⁵ “Open Doors,” Institute of International Education, Table 16 (2007).

⁶ “Geographic Trend Report for Examinees Taking the Graduate Management Admission Test,” GMAC (June 2005).

US business schools fell from 87.73% in 2000 to 83.9% in 2007.⁷ Western European schools were the most successful in competing for international students.

Benefits to Innovation

In addition to the direct gains from selling educational services, the US economy also gains indirectly from attracting international students. Domestic students may benefit from the concentration of talent and from learning in a more diverse environment. Furthermore, economic studies find that skilled migration significantly increases innovation in the host country, leading to higher wages for domestic workers.⁸

A World Bank study⁹ measured the impact of international students and other skilled migrants on patent applications and awards, a key scholarly measure of innovation. The authors noted that skilled migrants contribute to innovation and increase the real wages of domestic workers. The study predicted that a ten percent increase in the number of international graduate students (including all subjects) would raise the number of patent grants to US universities by 5.3% and non-university patent grants by 6.7%. Other increases in skilled migration would also raise patent applications by smaller but still significant amounts. The authors concluded that restrictions on skilled immigration could significantly reduce innovation, reducing US productivity and wages for domestic workers.

Difficulties recruiting skilled workers at home have driven innovation offshore. American companies have significantly increased patenting activity abroad.¹⁰ A National Bureau of Economic Research study found that US universities are also overcoming visa restrictions by collaborating abroad.¹¹ International collaborations increased five-fold in the 1980s and 1990s, compared with a doubling of domestic collaborations in the same period. The authors noted that placement of former graduate students was a key determinant in the decision to collaborate.

By offering students the chance to remain longer in the US after graduation, DHS can increase innovation in industry and in universities by making it easier for institutions to attract highly qualified international students.

Benefits to Entrepreneurship

As well as increasing innovation in a host country, skilled migration also increases entrepreneurial activity and business start-ups. A study for the National Venture Capital Association (NVCA) shows an empirical link between immigration, innovation, and

⁷ “World Geographic Trend Report for GMAT Examinees, 2003 to 2007,” GMAC (March 2008).

⁸ Gnanaraj Chellaraj, Keith E. Maskus, Aaditya Mattoo, “The Contribution of Skilled Immigration and International Graduate Students to US Innovation,” *World Bank Policy Research Working Paper 3588* (May 2005).

⁹ Ibid.

¹⁰ K.E. Maskus, “Intellectual Property Rights in the Global Economy,” *Institute for International Economics* (2000).

¹¹ J.D. Adams, G.C. Black, J.R. Clemmons, P.E. Stephan, “Scientific Teams and Institutional Collaboration: Evidence from US Universities 1981-1999,” *NBER Working Paper No. 10640* (2004).

entrepreneurship.¹² The study discovered that immigrants make up only 8.7% of the population today and 6.7% in 1990, but that 25% of US public companies started with venture-backed capital between 1990 and 2005 had at least one immigrant founder. These companies had a total market capitalization in excess of \$500 billion, employing an estimated 220,000 people in the United States and 400,000 people worldwide. In a separate profile of their members, the NVCA found that the majority of immigrants founding companies in the US came as children, teenagers, or as graduate students, or on H1-B visas.

Although immigrant-founded businesses are more concentrated in technical fields than enterprises founded by natives, immigrants have also founded such enterprises as Life Time Fitness, with 9,500 employees.¹³ Expanding OPT will make it easier for international students to remain longer after graduation and, by extension, to choose US universities in the first place. Closing the cap gap will make it easier for those students to transition to H1-B status.

By restricting the rule to STEM students, however, DHS fails to maximize the potential benefits of this rule change. Students with non-technical degrees will find it harder to remain in the US and be more likely to start businesses in other countries.

Benefits to US Competitiveness

When highly skilled individuals are grouped together, the productivity and wages of each individual rises. This effect is known to economists as “agglomeration” or “clustering”. It is the reason we see similar businesses grouped together, like tech companies in Silicon Valley or financial services in New York. In addition to the benefits of clustering, migrants also bring knowledge of culture and business practices in their home markets, giving the host country a competitive edge in overseas markets.

A report by McKinsey & Company,¹⁴ commissioned by the City of New York, found that competing foreign securities exchanges are “internationalizing” (increasing the proportion of Initial Public Offerings by foreign businesses) faster than the US.¹⁵ Reluctance to list in US markets may be partially attributable to the current regulatory environment. This would explain a reduction in overall listings (by US and foreign companies) on American exchanges, but cannot completely explain the disproportionate impact on foreign listings.

Highlighting the importance of attracting foreign business, the head of credit markets at a top Wall Street lender told the report that growth markets were exclusively overseas.¹⁶ Immigration rules were cited as a key barrier to the US financial services industry

¹² S Anderson, Michaela Platzer, “American Made: The Impact of Immigrant Entrepreneurs and Professionals on US Competitiveness,” National Foundation for American Policy (Arlington, VA).

¹³ *Ibid.*, 14.

¹⁴ McKinsey and Company, “Sustaining New York’s and the US’ Global Financial Services Leadership,” (2007).

http://www.schumer.senate.gov/SchumerWebsite/pressroom/special_reports/2007/NY_REPORT%20FINAL.pdf.

¹⁵ *Ibid.*, 47. Exhibit 10, citing Dealogic, year-to-date data compiled as of 11/02/2006.

¹⁶ *Ibid.*, 59.

attracting international talent, especially undergraduate talent.¹⁷ The report noted that “clustering”, the grouping of talented individuals in one place, was essential to maintaining a competitive lead.¹⁸

The City of London Corporation also believes UK immigration laws are responsible for giving London a competitive advantage in the international financial services industry. A 2005 survey of major financial market participants found that the availability of skilled personnel was the number one ranked factor of competitiveness in an international financial center, with 90% of survey respondents describing it as “very” or “critically” important.¹⁹ By contrast, cultural and language factors ranked 12th out of 14 with survey participants preferring a “cosmopolitan [location] . . . characterised by foreigners trading with each other.” London was rated as “excellent” in availability of skilled personnel by 75% of respondents compared with 66% for New York.²⁰

A separate report for the City of London Corporation noted that Financial and Related Business Services employers target a majority of graduates with no specialty in finance.²¹ Limiting changes in OPT rules to certain subjects would therefore make it harder for US firms to attract and retain talented individuals without degrees in science, technology, engineering, and math. Financial services firms are just one example of businesses that might seek to employ many highly trained individuals outside the STEM fields.

The UK government has recognized the importance of clustering by offering an automatic one-year visa to any individual with an MBA from a global top fifty business school²². Other countries competing for top talent from around the world are able to take advantage of US educated students who are forced to leave one year after completing their degree.

Closing the cap gap will make it easier for employers in the financial services and other high value-added industries to attract and retain international talent. Unfortunately, these industries will not benefit from the extensions of OPT being offered to STEM students. This will limit the supply of available talent, ultimately reducing the competitiveness of US industry. Domestic workers who would otherwise gain from the benefits of clustering (raising their productivity and wages) will also lose out.

III. Analysis of DHS Proposal

DHS should be commended for correctly identifying the costs associated with existing caps on skilled migration. Economic evidence strongly suggests that alleviating this problem would increase US competitiveness and benefit domestic workers. The proposed changes will benefit some industries and workers in those industries, but the choice to limit the scope of the rule change will also limit the potential benefits.

¹⁷ Ibid., 69.

¹⁸ Ibid., 72.

¹⁹ Z/Yen Limited, “The Competitive Position of London as a Global Financial Centre,” Table 1, (November 2005): 7.

²⁰ Ibid., 18.

²¹ “Graduate Skills and Recruitment in the City,” Financial Services Skills Council (September 2006): 3.

²² UK Border Agency, Highly Skilled Migrants Program (2008).
<http://www.bia.homeoffice.gov.uk/workingintheuk/hsmp/>.

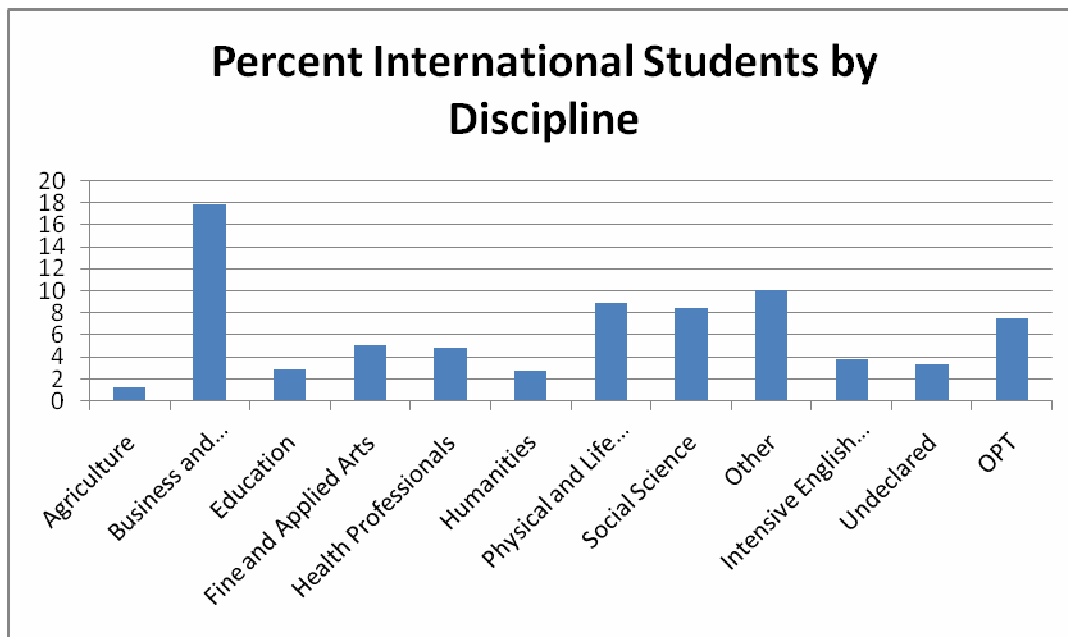
The interim solution the Department has chosen to overcome caps on migration is extending OPT for STEM students. In addition DHS has closed the cap gap, the period between the date OPT currently expires and the date a worker can take up H1-B status. This will make it easier for students to remain in the US after study and make US schools more desirable.

The benefits are two-fold. First, it will make US universities more attractive to international students. This provides direct benefits in the form of revenues generated by those students and indirect benefits such as increased innovation and the opportunity for domestic students to learn in a more diverse environment. Secondly, the US will benefit from increasing the available pool of highly skilled talent to industry. This will increase the productivity of domestic workers and the competitiveness of US industry.

A Significant Limitation

Unfortunately, many highly skilled students, particularly those in business, finance, economics, and related fields, would not be eligible for the OPT extension or cap gap relief. Only a minority of students come to the US study STEM subjects. Exports of educational services will therefore be substantially smaller if only students studying these subjects are included. The world-leading status of America’s universities and business schools will suffer as more students choose western European institutions. This will reduce diversity in American schools and potentially reduce the ability of those schools to attract top teaching talent to the detriment of domestic students.

US competitiveness will suffer from the loss of clustering effects. The loss will be greater if talented non-STEM students choose not to come to the US at all, preferring to study in countries where they have a better chance of staying. US firms will be forced to look overseas to find innovation, or entrepreneurs will choose to start their businesses in other countries.



Source: Open Doors, Table 16, International Students by Field of Study, Institute of International Education (2007)

DHS states “The inability of U.S. employers, in particular in the fields of science, technology, engineering and mathematics, to obtain H-1B status for highly skilled foreign students and foreign nonimmigrant workers has adversely affected the ability of U.S. employers to recruit and retain skilled workers and creates a competitive disadvantage for U.S. companies.”

Economic evidence supports this conclusion but also indicates that while the impact of applying the 17 month extensions to other disciplines may be smaller, it would be positive. There is therefore no reason to apply restrictions to any particular field or discipline. If DHS decides against applying the rule change to all students, the agency should expand the range of disciplines covered. In particular DHS should consider including students with MBAs, and degrees in finance, economics and related disciplines.

IV. Conclusion

The Department of Homeland Security is correct in its analysis of the problem and has proposed a limited solution with significant economic benefits. The application of this rule will increase the rate of innovation and entrepreneurship in the US economy, along with American competitiveness. Domestic students and workers will both gain.

These benefits will be limited by the decision to limit an OPT extension to students studying science, technology, engineering and math. High value-added industries such as international financial services will lose the potential improvements in productivity that would result from applying this change to a broader range of disciplines. Expanding the number of disciplines qualifying for the 17 month extensions would increase the benefit. DHS should articulate a clear reason why other students should not be included. In particular the agency should consider including students with MBAs, and degrees in finance, economics and related disciplines.

Mark Adams
Mercatus Center at George Mason University
3301 North Fairfax Drive
Hazel Hall, Suite 450
Arlington, VA 22201
(703) 993-4930

Appendix I RSP Checklist

Element	Agency Approach	RSP Comments
1. Has the agency identified a significant market failure?	Identifies impact on US economy of restrictions on availability of highly skilled labor caused by H1-B visa caps. Grade: A	This is not strictly a market failure as the primary cause is congressional action.
2. Has the agency identified an appropriate federal role?	Immigration policy is a clear federal responsibility. Grade: A	Free movement of people within the US implies that only the federal government could exercise effective control.
3. Has the agency examined alternative approaches?	The agency mentions raising the visa cap but notes this requires legislation. Grade: C	Congress severely limits DHS discretion to consider options.
4. Does the agency attempt to maximize net benefits?	DHS limits OPT extension to students in technical fields who account for only half of all international students. Grade: B	Economic research indicates that benefits would be much higher if applied to all students.
5. Does the proposal have a strong scientific or technical basis?	Proposal is consistent with economic research on the benefits of skilled migration. Grade: B	
6. Are distributional effects clearly understood?	DHS is trying to make it easier for highly skilled international students to stay in the US, noting strong industry demand to hire them. Grade: N/A	Economic evidence suggests current restrictions on migration reduce economic growth. Thus, lifting restrictions is “win-win.”
7. Are individual choices and property impacts understood?	Grade: N/A	Proposal raises no “property rights” issues because it increases regulated entities’ flexibility.