Impact of Employer-Sponsored Tech Immigrants on the U.S.

Norm Matloff Department of Computer Science University of California at Davis Davis, CA 95616 USA matloff@cs.ucdavis.edu

The Changing Face of America: Going Beyond the Rhetoric on Immigration November 15, 2010

・ロト ・ 日 ・ ・ 田 ・ ・ 日 ・ うへぐ

• H-1B work visa, employer-sponsored green cards.

◆□▶ ◆□▶ ◆臣▶ ◆臣▶ 臣 の�?

• H-1B work visa, employer-sponsored green cards. (I'll refer to all these workers as simply "H-1Bs" for brevity.)

◆□▶ ◆□▶ ◆三▶ ◆三▶ 三三 のへぐ

- H-1B work visa, employer-sponsored green cards. (I'll refer to all these workers as simply "H-1Bs" for brevity.)
- Employers claim hire H-1Bs due to shortage, need for "best and brightest."

- H-1B work visa, employer-sponsored green cards. (I'll refer to all these workers as simply "H-1Bs" for brevity.)
- Employers claim hire H-1Bs due to shortage, need for "best and brightest."

• Critics (including me) say it's really about cheap labor.

• We all support the immigration of outstanding talents.

◆□▶ ◆□▶ ◆臣▶ ◆臣▶ 臣 の�?

- We all support the immigration of outstanding talents.
- But most of the H-1Bs are ordinary people, doing ordinary work.

◆□▶ ◆□▶ ◆三▶ ◆三▶ 三三 のへぐ

- We all support the immigration of outstanding talents.
- But most of the H-1Bs are ordinary people, doing ordinary work.
- Several academic studies and two congressionally commissioned reports have confirmed H-1Bs are often paid less than Americans.

- We all support the immigration of outstanding talents.
- But most of the H-1Bs are ordinary people, doing ordinary work.
- Several academic studies and two congressionally commissioned reports have confirmed H-1Bs are often paid less than Americans. (Americans = U.S. citizens or LPRs.)

- We all support the immigration of outstanding talents.
- But most of the H-1Bs are ordinary people, doing ordinary work.
- Several academic studies and two congressionally commissioned reports have confirmed H-1Bs are often paid less than Americans. (Americans = U.S. citizens or LPRs.)
- It's loopholes, not fraud. Underpayment of H-1Bs is LEGAL.

- We all support the immigration of outstanding talents.
- But most of the H-1Bs are ordinary people, doing ordinary work.
- Several academic studies and two congressionally commissioned reports have confirmed H-1Bs are often paid less than Americans. (Americans = U.S. citizens or LPRs.)
- It's loopholes, not fraud. Underpayment of H-1Bs is LEGAL.

• No independent study has shown a tech labor shortage.

- We all support the immigration of outstanding talents.
- But most of the H-1Bs are ordinary people, doing ordinary work.
- Several academic studies and two congressionally commissioned reports have confirmed H-1Bs are often paid less than Americans. (Americans = U.S. citizens or LPRs.)
- It's loopholes, not fraud. Underpayment of H-1Bs is LEGAL.
- No independent study has shown a tech labor shortage.
- Don't demonize the Indian "body shops." The big mainstream U.S. firms are just as culpable, including in hiring foreign students from U.S. campuses.

H-1Bs As Cheap Labor

・ロト ・ 日本・ 小田 ・ 小田 ・ 今日・

• Type I: Paying H-1Bs less than comparable Americans.

◆□▶ ◆□▶ ◆臣▶ ◆臣▶ 臣 の�?

- Type I: Paying H-1Bs less than comparable Americans.
- Type II: Hiring younger (less expensive) H-1Bs instead of older (more expensive) Americans.

◆□▶ ◆□▶ ◆臣▶ ◆臣▶ 臣 のへぐ

Type I wage savings:



Type I wage savings:

• Legal prevailing wage defined by the *job*, not the *worker*. E.g. can a Master's worker for a Bachelor's price.

▲ロト ▲帰ト ▲ヨト ▲ヨト - ヨ - の々ぐ

Type I wage savings:

- Legal prevailing wage defined by the *job*, not the *worker*. E.g. can a Master's worker for a Bachelor's price.
- DOL prevailing wages don't account for "hot" skill sets, which add about 15% to wages in the open labor market.

Type I wage savings:

- Legal prevailing wage defined by the *job*, not the *worker*. E.g. can a Master's worker for a Bachelor's price.
- DOL prevailing wages don't account for "hot" skill sets, which add about 15% to wages in the open labor market.
- Type I underpayment has been found to range from 15-20% (Matloff, 2003) to 33% (Ong, 1997).

Type I wage savings:

- Legal prevailing wage defined by the *job*, not the *worker*. E.g. can a Master's worker for a Bachelor's price.
- DOL prevailing wages don't account for "hot" skill sets, which add about 15% to wages in the open labor market.
- Type I underpayment has been found to range from 15-20% (Matloff, 2003) to 33% (Ong, 1997).
- NRC, GAO surveys found that many employers admitted that they pay H-1Bs less than Americans.

Type I wage savings:

- Legal prevailing wage defined by the *job*, not the *worker*. E.g. can a Master's worker for a Bachelor's price.
- DOL prevailing wages don't account for "hot" skill sets, which add about 15% to wages in the open labor market.
- Type I underpayment has been found to range from 15-20% (Matloff, 2003) to 33% (Ong, 1997).
- NRC, GAO surveys found that many employers admitted that they pay H-1Bs less than Americans. And GAO pointed out that they do this LEGALLY.

Type I wage savings:

- Legal prevailing wage defined by the *job*, not the *worker*. E.g. can a Master's worker for a Bachelor's price.
- DOL prevailing wages don't account for "hot" skill sets, which add about 15% to wages in the open labor market.
- Type I underpayment has been found to range from 15-20% (Matloff, 2003) to 33% (Ong, 1997).
- NRC, GAO surveys found that many employers admitted that they pay H-1Bs less than Americans. And GAO pointed out that they do this LEGALLY.

• Huge statistical pitfalls lurk here. Beware of badly flawed studies on BOTH sides of this issue, e.g. Zavodny, Mithas/Lucas, Tambe/Hitt.

Type I wage savings:

- Legal prevailing wage defined by the *job*, not the *worker*. E.g. can a Master's worker for a Bachelor's price.
- DOL prevailing wages don't account for "hot" skill sets, which add about 15% to wages in the open labor market.
- Type I underpayment has been found to range from 15-20% (Matloff, 2003) to 33% (Ong, 1997).
- NRC, GAO surveys found that many employers admitted that they pay H-1Bs less than Americans. And GAO pointed out that they do this LEGALLY.
- Huge statistical pitfalls lurk here. Beware of badly flawed studies on BOTH sides of this issue, e.g. Zavodny, Mithas/Lucas, Tambe/Hitt.
- Lure of a green card is a nonmonetary form of compensation, just like, say, a shorter commute for you and me. Thus many will accept lower pay.



• Type II even more important than Type I.





• Type II even more important than Type I.

◆□▶ ◆□▶ ◆臣▶ ◆臣▶ 臣 の�?

• "Old" here means 35!

Age Issues

- Type II even more important than Type I.
- "Old" here means 35!
- HR rejects American applicants as "overqualified"—and then tells hiring managers there are no applicants, so must hire H-1Bs.

Age Issues

- Type II even more important than Type I.
- "Old" here means 35!
- HR rejects American applicants as "overqualified"—and then tells hiring managers there are no applicants, so must hire H-1Bs.

• Again, fully legal.

(ロ)、(型)、(E)、(E)、 E) の(の)

1989 NSF position paper:



1989 NSF position paper:

• "PhD salaries too high."



1989 NSF position paper:

- "PhD salaries too high."
- "We'll bring down salaries by flooding the market with foreign workers."

▲□▶ ▲圖▶ ▲臣▶ ▲臣▶ = 臣 = のへで

1989 NSF position paper:

- "PhD salaries too high."
- "We'll bring down salaries by flooding the market with foreign workers."
- "Yes, the stagnant salaries will drive away domestic students from PhD programs, but well, OK."

1989 NSF position paper:

- "PhD salaries too high."
- "We'll bring down salaries by flooding the market with foreign workers."
- "Yes, the stagnant salaries will drive away domestic students from PhD programs, but well, OK."

• Result: New lawyers today make 50% more than new CS PhDs.

1989 NSF position paper:

- "PhD salaries too high."
- "We'll bring down salaries by flooding the market with foreign workers."
- "Yes, the stagnant salaries will drive away domestic students from PhD programs, but well, OK."

• Result: New lawyers today make 50% more than new CS PhDs.

This has caused an internal brain drain.
◆□▶ ◆□▶ ◆臣▶ ◆臣▶ 臣 のへぐ

• Some H-1Bs really ARE outstanding talents. We should facilitate their immigration (and I have).

- Some H-1Bs really ARE outstanding talents. We should facilitate their immigration (and I have).
- But most are NOT in the "best and brightest" league.

- Some H-1Bs really ARE outstanding talents. We should facilitate their immigration (and I have).
- But most are NOT in the "best and brightest" league.
- Foreign PhD students disproportionately concentrated in lower-ranking programs.

- Some H-1Bs really ARE outstanding talents. We should facilitate their immigration (and I have).
- But most are NOT in the "best and brightest" league.
- Foreign PhD students disproportionately concentrated in lower-ranking programs.
- H-1Bs have fewer patents *per capita* than Americans. (Hunt, 2010) is the only one to measure per capita.

- Some H-1Bs really ARE outstanding talents. We should facilitate their immigration (and I have).
- But most are NOT in the "best and brightest" league.
- Foreign PhD students disproportionately concentrated in lower-ranking programs.
- H-1Bs have fewer patents *per capita* than Americans. (Hunt, 2010) is the only one to measure per capita.
- H-1Bs have disproportionately fewer dissertation awards than Americans.

Adverse Impacts

◆□▶ ◆□▶ ◆臣▶ ◆臣▶ 臣 のへぐ

• Cheap labor, size of tech H-1B population, reduce wage growth.

◆□▶ ◆□▶ ◆臣▶ ◆臣▶ 臣 の�?

• Cheap labor, size of tech H-1B population, reduce wage growth.

• Even more importantly, H-1B labor pool reduces job opportunities for Americans, especially those over 35.

- Cheap labor, size of tech H-1B population, reduce wage growth.
- Even more importantly, H-1B labor pool reduces job opportunities for Americans, especially those over 35.
- Tech, especially PhD, becomes less attractive to American students. The shortness of careers is especially unattractive.

- Cheap labor, size of tech H-1B population, reduce wage growth.
- Even more importantly, H-1B labor pool reduces job opportunities for Americans, especially those over 35.
- Tech, especially PhD, becomes less attractive to American students. The shortness of careers is especially unattractive.

• Loss of U.S. capacity to innovate (next slide).

Advers Impact on U.S. Innovation

◆□▶ ◆□▶ ◆臣▶ ◆臣▶ 臣 の�?

• Many H-1Bs come from cultures with rote-memory education systems. (All East Asian governments have tried to remedy this.)

- Many H-1Bs come from cultures with rote-memory education systems. (All East Asian governments have tried to remedy this.)
- The one comparative advantage Americans have is creativity.

- Many H-1Bs come from cultures with rote-memory education systems. (All East Asian governments have tried to remedy this.)
- The one comparative advantage Americans have is creativity.
- Thus the displacement of Americans by H-1Bs means a net loss in U.S. innovation.

What to Do

◆□▶ ◆□▶ ◆臣▶ ◆臣▶ 臣 のへぐ



• Must get a REALISTIC legal definition of prevailing wage.



What to Do

• Must get a REALISTIC legal definition of prevailing wage.

◆□▶ ◆□▶ ◆三▶ ◆三▶ 三三 のへぐ

• Bipartisan Durbin/Grassley bill does this well.

What to Do

• Must get a REALISTIC legal definition of prevailing wage.

- Bipartisan Durbin/Grassley bill does this well.
- MUST reduce the power of lobbyists.