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Coyote ugly: the deadweight cost of rent seeking for immigration policy

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Abstract Many studies use a Harberger triangle method to estimate the immigration surplus to the native born population and conclude that the benefit of immigration is very small in proportion to the size of the US economy and thus the United States does not stand to lose much if immigration is further restricted. This calculation neglects the rent seeking costs that the US economy bears when immigration policy is politically determined. This study estimates the rent seeking losses that the US economy could suffer if immigration policy were reformed to further close the borders.

Keywords Immigration · Rent seeking · Deadweight loss · Immigration surplus

JEL Classification H0 · J08 · J18 · J21 · J61 · K31

1 Introduction

Immigration reform resurfaced as a major political issue in the first decade of the twenty first century. President Bush and backers of a McCain–Kennedy Senate bill called for establishing a so-called guest worker program as well as easing the path to citizenship for an estimated 11 million illegal immigrants already in the United States. The House of Representatives Republicans backed a bill requiring the illegal immigrants in-country to return home and strengthening border security without guaranteeing any relaxation of the legal obstacles to immigration. The response to stricter immigration requirements was dramatic. News media gave the issue tremendous coverage, numerous think tanks, and lobbyists produced immigration studies, and protests were organized. The result was a political stalemate. The recent political battle over immigration highlights an important shortcoming in the academic research on the economics of immigration. Scholars have not taken rent seeking costs into account when estimating immigration’s impact on the US economy.

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51 Two separate strands of literature study the economics of immigration. In one strand,
52 numerous articles estimate the impact of immigration on the economy, including the wages
53 and employment opportunities of the native born population, the fiscal costs and benefits of
54 immigration, how immigration and trade interact, immigration's impact on long run growth,
55 and the size of the immigration surplus created for native citizens.¹ The estimates of the im-
56 migration surplus are of the most relevance for this study.² The immigration surplus is the net
57 benefit that accrues to the native born population because of immigration. It is estimated as
58 the size of the gains to capital owners and consumers who benefit from the services provided
59 by immigrant labor net of the cost in terms of lower wages to the native born for whom the
60 immigrants represent potential substitutes.³ George Borjas pioneered the immigration sur-
61 plus literature and often uses this approach to measure the gains to the US economy from
62 immigration (1995, 1999, 2008).⁴ His most recent estimate is that immigration increases the
63 real income of the native born by about 0.2% (Borjas 2008: 256). Although Borjas supports
64 tighter restrictions on immigration, even economists who support more open immigration
65 often agree that while the net surplus from immigration is positive, it is also relatively small
66 compared to the size of the US economy.⁵ However, calculations of the immigration surplus
67 have ignored the literature on the political determinants of immigration policy.

68 The political economy literature has examined how immigration will affect income redis-
69 tribution (Mayr 2007), how it will impact constitutional consent (Josten and Zimmermann
70 2005), and how fiscal spending can influence immigration in an open labor market such as
71 the one between many EU countries (Thum 2004). But most of the literature uses median
72 voter or interest group models to explain why particular immigration policies are adopted.
73 Median voter models typically explain the adoption of immigration policies as determined
74 by the distribution of ownership of capital. Benhabib (1996) shows that when capital-poor
75 voters are in the majority, restrictive immigration policies will be favored, but that in coun-
76 tries where the capital-rich are in the majority more open immigration policies will be fa-
77 vored. Similarly, Flores (1997) uses a median voter model to demonstrate that immigration
78 policy will be determined by the distribution of ownership of the factors of production.

79 Other public choice economists have modeled the determination of immigration policy
80 as the outcome of interest group competition. These studies typically model the divergent
81 interests of skilled workers, unskilled workers, and capital owners. Sollner (1999) develops
82 an interest group model and shows that immigration increases the income of capital owners
83 and skilled workers but decreases the income of unskilled workers. Scheve and Slaughter
84 (2001) demonstrated empirically that low-skilled workers tend to prefer restrictive immigra-
85 tion policies whereas capital owners prefer more open policies. Haus (1995) explains how
86 transnational interest groups can create more open immigration policies than domestic inter-
87 est groups can. Shughart et al. (1986) have modeled the interest group pressure applied by
88

90 ¹ See Friedberg and Hunt (1995), Ghatak et al. (1996), Schiff (1996) and Commander et al. (2004) for surveys
91 of the various aspects of the literature on economics and immigration.

92 ² The immigration surplus literature is surveyed in Drinkwater et al. (2002).

93 ³ Whether immigrants depress the wages of the native born population is a debated topic. See Card (1990),
94 Borjas (2003), and Card (2005), for some of the key papers in the debate.

95 ⁴ Bauer and Zimmermann (1999) employ the Borjas approach to measure the impact of immigration on the
96 EU economy.

97 ⁵ See, for instance, the Independent Institute's "Open Letter on Immigration" signed by more
98 than 500 economists, which states, "Overall, immigration has been a net gain for American
99 citizens, though a modest one in proportion to the size of our 12 trillion-dollar economy."
100 <http://www.independent.org/newsroom/article.asp?id=1727>

101 laborers and producers and found that a government regulator would tend to favor labor during
102 recessions and capital owners during economic expansions. Amegashie (2004) comes to
103 a similar conclusion.

104 Kaempfer et al. (2004) model interest groups differing in terms of their political lobbying
105 effectiveness on the immigration issue. They find that if groups were all equally effective,
106 open immigration policies would be adopted. However, because labor interests are orga-
107 nized in unions, they are able to surmount the collective action costs of organizing and
108 avoid free riding better than consumers or capital owners, so socially inefficient immigra-
109 tion restrictions are adopted. Facchini et al. (2004) complement this model in an empirical
110 study of ten Western European countries; they find that a ten-percentage point increase in
111 union density leads to a one-percentage point decrease in the share of immigrants in the popu-
112 lation. Facchini et al. (2007) empirically examine lobbying activity and H1B visas in the
113 United States. They find that both pro- and antiimmigration lobbying groups have a statis-
114 tically and economically significant impact in determining the number of H1B visas issued
115 across industries.⁶ Finally, Chau (2003) shows how politicians can bundle reform proposals
116 to include both employer sanctions and amnesty for existing illegal immigrants as a way to
117 capture rents by reducing the deadweight costs employer sanctions would entail.

118 Although much work has been done by public choice economists to study the political
119 dynamics that determine immigration policy, the results of that research have not influenced
120 how the immigration surplus is calculated. If interest groups determine immigration policy,
121 then rent seeking costs will impact the size of the immigration surplus resulting from any
122 policy change. Yet, when the size of the deadweight costs of the restrictions in the last major
123 immigration reform bill was calculated (Reynolds and McCleery 1988), rent seeking costs
124 were left out. Discussions of the recent House and Senate Reform bills also fail to take
125 account of these costs when they imply that a more restrictive policy will risk losing only
126 the relatively modest immigration surplus the United States currently enjoys.

127 The immigration surplus literature is in a situation similar to economists' estimates of the
128 deadweight costs of monopoly up until the late 1960s. Harberger's (1954) influential paper
129 estimated that the deadweight cost of monopolies in the United States was only 0.1% of
130 the GNP. Estimates of this magnitude went unchallenged until Tullock (1967) showed that
131 the true costs of politically determined monopolies were not just the lost gains from trade
132 between suppliers and consumers but also the resources that were spent trying to secure
133 monopoly rights from the government. Immigration policy is politically determined and is
134 the object of rent seeking by labor, business, and consumer interests. As a result, the current
135 immigration surplus calculations are not accurate estimates of the losses the US economy
136 will suffer if it moves to a more restrictive immigration policy.

137 This paper employs public choice insights to better estimate the deadweight cost of fur-
138 ther immigration restrictions in the United States. Section 2 follows the standard method
139 of calculating the immigration surplus. The potential rent seeking losses caused by closing
140 the borders are estimated in Sects. 2.1 and 2.2. Sections 2.1 and 2.2 also contains a discus-
141 sion that considers how rent seeking changes the impact of efforts to liberalize immigration
142 policy. Section 3 estimates the deadweight losses from the 2005/2006 House and Senate
143 immigration reform bills. Section 4 concludes.

144 ⁶H1B visas allow highly skilled "specialty occupation" workers from abroad to come to the United States to
145 work.
146
147

2 Calculating the immigration surplus

Borjas's (1995, 1999, 2008) basic method of calculating the immigration surplus relies on a competitive, market clearing model with no externalities. He explicitly recognizes that he is following the standard Harberger methodology, "Using a well-known formula in economics (a variation on the theme of the so-called Harberger triangle), we can estimate that immigration increases the real income of natives, but only by about 0.2%" (Borjas 2008: 256). Borjas relaxes some assumptions to estimate how the immigration surplus will vary under other conditions, including when immigrants also increase the capital stock (1999: 94) (1995: 9), if they do not lower the wages of natives (1999: 96) (1995: 10), if they generate externalities (1999: 96) (1995: 11–12), and if they have skills different than those of the native born population (1999: 98–103) (1995: 12–14). However, neither Borjas nor other economists who estimate the immigration surplus incorporate rent seeking costs into their estimate of the immigration surplus.

The basic model for the standard immigration surplus calculation assumes that economic output is a function of capital and labor, $Q = f(K, L)$, and that the capital stock is unaffected by immigration. Natives and foreigners are considered to be perfect substitutes so that the total labor force is $L = N + M$, where N is the number of native born workers and M is the number of immigrant workers. It is further assumed that the supplies of capital and labor are perfectly inelastic and that the production function is characterized by constant returns to scale. The model is static. It does not account for population or economic growth through time.

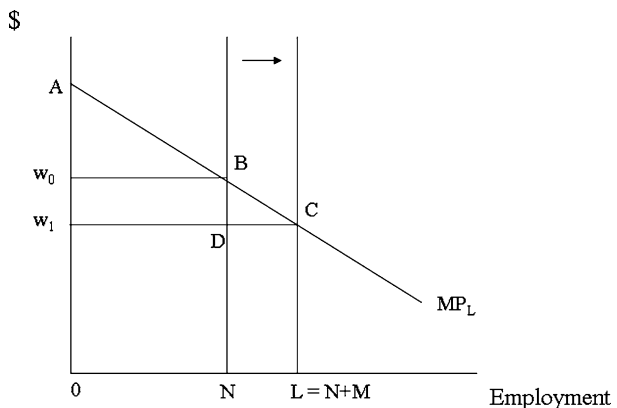
The economy is in equilibrium, so factor prices equal their marginal products. Prior to the entry of immigrants, total native earnings are $Q_N = r_0K + w_0N$, where r_0 is the price of capital and w_0 is the price of labor. Figure 1 illustrates the initial equilibrium graphically where national income for the native born equals the trapezoid ABNO.

When immigrants enter this economy they shift the supply of labor out, and the equilibrium wage falls to w_1 so that total national income now equals ACL0. The net immigration surplus to the native born population is given by the familiar Harberger triangle BCD, or $\frac{1}{2} \cdot (w_0 - w_1) \cdot M$.

Rewriting the immigration surplus as a fraction of national income results in:

$$(\Delta Q_N / Q) = -\frac{1}{2}sem^2,$$

Fig. 1



201 where s is the share of national income going to labor, e is the elasticity of labor demand
202 with respect to the wage, and m is the fraction of immigrants in the labor force. Labor's
203 share of national income has been relatively stable, averaging 70.5% during the last 50
204 years (Pakko 2004). Hamermesh's (1993) widely cited survey of labor demand found its
205 elasticity to be -0.3 . In 2007, there were approximately 24 million foreign born workers in
206 the US labor force comprising 15.7% of the total civilian labor force (BLS 2008). Solving
207 the above equation for these values implies that immigration has raised the income of the
208 native born population by approximately 0.26% of GDP, or approximately \$35.9 billion in
209 2007. This net gain to the native population is the amount that the gains to capital owners
210 exceed the losses to laborers. Although using the Harberger triangle method of calculating
211 the net surplus from immigration yields only a modest quarter of 1% of GDP, changes in
212 immigration policy can secure sizable rents for labor or capital interests. If the rents become
213 the object of rent seeking activity, then the deadweight loss that a change in immigration
214 policy would create could be substantially larger than the \$36 billion Harberger triangle
215 surplus.
216

217 2.1 Estimating the rent seeking costs

218
219 In the above model, immigration creates a substantial income shift away from laborers and
220 toward owners of capital. Thus, immigration restrictions would create rents that laborers
221 would lobby to secure and capital owners would lobby to defend. Therefore, the impact
222 of changes in immigration policy on the surplus needs to take account of deadweight rent
223 seeking losses as well as Harberger triangle losses.
224

225 At this point, it is necessary to distinguish between stocks and flows of immigrants.
226 Immigration policy has allowed the annual flow of immigrants to result in a current stock
227 of 24 million foreign born workers. Critics of immigration rarely advocate deporting all
228 foreign born workers but do sometimes advocate closing the border to any future flow. Over
229 time the effect of the closed border (if effectively enforced) would eventually shrink the
230 percentage of foreign born workers to 0% of the labor force.⁷ Graphically in Fig. 1, closing
231 the borders would continually shift the L curve backward until it reached N. If we assume
232 that without closing the borders the fraction of foreign born workers in the workforce would
233 have remained stable, we can calculate the transfers closing the border would create.

234 By moving from current policy to closed borders, workers stand to gain the area
235 w_0BDw_1 in Fig. 1, and capital owners (and other consumers of immigrant services) stand
236 to lose that area plus the triangle BCD in the long run. Expressed as a percentage of national
237 income, the gain to domestic laborers in moving from current levels of immigration to a
238 completely closed border leads to:

$$239 \text{(Change in Native Labor Earnings}/Q) = sem(1 - m)$$

240 and capital owners lose that amount plus the surplus:

$$241 \text{(Change in Income of Capitalists}/Q) = -sem\left(1 - \frac{1}{2}m\right).$$

242
243
244
245
246
247
248 ⁷Of course, it would take time for all the existing foreign born workers to retire, so the transfer would be
249 smaller but would grow annually until it reached the point calculated here. Alternatively, if all foreign born
250 workers were deported, the labor force would immediately jump from L to N .

251 In the United States today that means laborers stand to gain 2.8% of GDP, or \$386 billion.
252 Owners of capital would stand to lose that transfer plus the immigration surplus triangle,
253 approximately 3% of GDP, or \$422 billion.

254 Borjas assumes the \$386 billion would simply be a transfer, “Immigration redistributes
255 wealth from labor to capital,” and when immigration lowers wages “These lost earnings do
256 not vanish into thin air. They represent an income transfer from workers to users of immi-
257 grant services” (1999: 91). However, because this is a political decision and \$386 billion of
258 rents are at stake, we can expect organized labor, business interests, and consumer groups
259 to try to capture these rents. The resulting deadweight loss could transform much of the
260 \$386 billion that the literature assumed to be a transfer into further deadweight costs of
261 immigration restrictions.

262 How much of the \$386 billion could become a deadweight loss from rent seeking? Public
263 choice scholars have devised numerous models to estimate how much of a rent will be dissi-
264 pated through rent seeking activity.⁸ Two important variables are the returns to rent seeking
265 and the degree of political competition over securing the rent. In the case of completely
266 closing the border, the competing interest groups are essentially labor and capital. Either the
267 restriction will be enacted and labor benefits, or the restriction is rejected and capital own-
268 ers benefit. In this case, we can model the rent seeking game with a fixed number of $n = 2$
269 players.⁹

270 For a total rent of value R , risk-neutral interests will choose the investment in rent seeking
271 I to maximize their expected gain

$$272 \quad EG = \left(\frac{I^r}{I^r + T} \right) R - I$$

273 where $r < 1$, $r = 1$, $r > 1$ indicate diminishing, constant, or increasing returns to rent seek-
274 ing investments and T is the impact of the total rent seeking expenditures by the other $n - 1$
275 rent seekers, $T = \sum_{j \neq i} I_j^r$. For any given level of spending by other interest groups, the
276 FOC is given by

$$277 \quad \frac{r I^{r-1} R}{I^r + T} - \frac{r I^{r-1} I^r R}{(I^r + T)^2} - I = 0.$$

278 If we assume a symmetric equilibrium, a rent seeker will invest I such that¹⁰

$$279 \quad I = \frac{(n-1)}{n^2} r R$$

280 as long as when I is substituted into the expected gain equations above it results in a positive
281 expected gain; a risk-neutral rent seeker would not otherwise attempt to secure the rent.

291 ⁸See Mueller (2003: 333–358) for a summary of these models.

292 ⁹In the case of a partial immigration restriction, capital and labor interests would not be unified into two
293 opposing groups. Instead, some capital interests may lobby for highly skilled workers, whereas others would
294 lobby for low-skilled workers or any other subset of the labor force. Labor interests could be similarly divided.
295 As the number of interest groups increases, a more complete dissipation of the rent will occur.

296 ¹⁰Technically, the gains to the capital owners and users of immigrant services would not be quite symmetrical
297 to the losses to the workers since the capital owners would gain or lose the rent rectangle plus the Harberger
298 triangle while the workers only stand to gain or lose the rectangle. For simplicity, we assume symmetry since
299 the value of the triangle is trivial compared to the rents at stake in the rectangle and would not change our
300 analysis much.

Multiplying the above by n , we can solve for the total amount invested in rent seeking:

$$nI = \frac{n(n-1)}{n^2} rR = \frac{(n-1)}{n} rR.$$

Total rent seeking as a fraction of rents sought is found by dividing by R :

$$\frac{nI}{R} = \frac{(n-1)}{n} r.$$

Solving with just two competing interest groups, labor and capital owners, and constant returns to scale results in the standard result of half of the rents being dissipated through rent seeking activity. In the case of the United States, closing the border completely and keeping it closed could be expected eventually to result in a deadweight loss from rent seeking of \$193 billion per year. Rent seeking losses could be more than five times the deadweight loss generated by the Harberger triangle alone. Total deadweight costs to the US economy would equal \$229 billion or 1.7% of GDP. Increasing or decreasing returns to rent seeking varies the estimates, but under most plausible assumptions the deadweight cost of rent seeking is orders of magnitude greater than the Harberger triangle losses.¹¹

The above model most likely overestimates the amount of rent seeking activity that would take place in response to a proposal to close the borders. Most importantly, capital and labor interests were each modeled as unified actors. In reality, many capitalists and workers gain or lose from closing the borders. Each would have an incentive to free ride on the lobbying activity of other allied interests. Labor unions and business associations might help mitigate such free riding, but surely a substantial amount would remain. The predicted rent seeking losses of \$193 billion would of course be reduced in the presence of significant free riding.

2.2 Rent seeking and liberalization

The above model estimated only increased rent seeking costs of further immigration restrictions from the existing status quo. However, current immigration policies already substantially limit flows of migrants to the United States. Deriving theoretical estimates of the deadweight losses caused by current policy is not possible because we would have to know the percentage of foreign born workers that would be in our labor force as a result of an open borders policy. The relevant counterfactual is unavailable. However, given the substantial income difference between the United States and much of the world, it is likely that many people want to migrate to the United States, so total rent seeking losses from restrictions now in place likely are substantial. In examining trade policy, most estimates of rent seeking compare current policies to a free trade baseline and implicitly assume that a movement from current policy to free trade would be efficient.¹² Thus far, this discussion of immigration has mirrored that by comparing tighter restrictions only to the status quo and briefly discussing the status quo compared to a “free trade in labor” policy.

The question of, “given the current immigration policy, how would attempts to liberalize be met with rent seeking resistance” remains of interest. Tollison and Wagner’s (1991)

¹¹With decreasing returns and an r value of 0.5, deadweight losses would be \$97 billion. With increasing returns and an r value of 1.5, deadweight losses would be \$290 billion. Rents are fully dissipated at an r value of 2; no pure strategy exists for higher values of r . See Higgins et al. (1985) for more on theoretical restrictions on the value of r .

¹²See Mueller (2003: 348–354) for a summary.

351 research examining efforts to eliminate monopolies, and inefficient income transfers more
352 generally, is extremely relevant.¹³ They argue that,

353 Any social value from reform resides not in reforming existing deformities but in
354 creating social arrangements that prevent the emergence of new deformities. Genuine
355 reform, we submit, should ignore the past and look to the future; it should acquiesce
356 in the deformities of the past and should seek only to prevent new ones from arising
357 (1991: 57).
358

359 Their reasoning is straightforward. If an interest group receiving a rent resists reform, the
360 efforts of the reformer and the interest group trying to protect its rent will waste more re-
361 sources than potential Harberger triangle gains. Thus, a wealth-maximizing reformer would
362 not attempt to undertake reform. Applied to our above discussion of immigration, Tollison
363 and Wagner's argument seems to imply that we should maintain the status quo and take the
364 question of immigration policy off the political table.

365 Tollison and Wagner do leave a couple paths open for immigration liberalization re-
366 formers. They note that it would be irrational for an interest group to resist reform if the
367 reformer's force was overwhelming, "rendering negative the expected return to any degree
368 of resistance" (1991: 62). Wittman (1995) and Caplan (2007) argue that interest groups op-
369 erate on margins of voter indifference to the details of policies but that voters largely get the
370 policies the median voter wants. This leaves the door open for advocates of open borders to
371 convince the mass of the population that policy, like free trade, is in their best interest. If
372 mass public opinion were significantly moved, it could make the success of interest group
373 resistance so unlikely that they would not resist and a move to open borders from the current
374 status quo could be welfare enhancing.

375 Tollison and Wagner offer another interesting argument that applies to immigration. They
376 consider the case of the "faction minded reformer" who counts the welfare of groups they
377 favor but does not count the welfare of groups they do not. If advocates of open borders view
378 the income transfer caused by the status quo policy as unjust, they may discount (or ignore)
379 the costs to interest groups who lobby for the preservation of the status quo much the way
380 that some people might choose to ignore the cost criminals bear when they are punished. To
381 the extent that open borders advocates do not have lexicographic preferences for economic
382 efficiency but instead also advocate open borders for other moral reasons, they may still
383 advocate for liberalization despite rent seeking losses.
384
385

386 **3 Model applied to 2005 and 2006 immigration reform bills**

387

388 In December 2005, the US House of Representatives passed H.R. 4437, the Border Pro-
389 tection, Antiterrorism, and Illegal Immigration Control Act of 2005. The bill, among other
390 things, would have made illegal immigrants felons, increased penalties on employers who
391 hire illegal immigrants, and erected a fence along much of the border between the United
392 States and Mexico. The bill offered no path toward permanent citizenship for the current
393 illegal immigrants and no guest worker program for future immigrants. The goal of the bill
394 was to move the current illegal immigrant population out of the United States. In contrast,
395 in May 2006, the US Senate passed S.2611, the Comprehensive Immigration Reform Act of
396 2006, otherwise known as the McCain-Kennedy immigration reform bill. This bill would
397
398

399 ¹³Shughart (1999) makes a closely related argument.
400

401 have provided a path to permanent citizenship for the illegal immigrants already in-country
402 and created a guest worker program to allow approximately 200,000 more migrant workers
403 into the United States in each of the next 5 years.

404 The House and Senate immigration reform bills were essentially opposites of each other.
405 The House bill ultimately aimed at removing current illegal immigrants from the United
406 States, whereas the Senate bill would have created a new “Y” visa that would have allowed
407 current illegal residents of the United States the ability to stay legally for the rest of their
408 lives. Although there was much debate about the guest worker program, with only 1 mil-
409 lion foreign born workers affected in total and a legislated date-certain end to the program,
410 the immigration surplus and rents created by the guest worker program would have been
411 relatively small compared to the impact created by removing or legalizing the existing 11
412 million illegal immigrants. From here forward, we estimate the surplus and rents ignoring
413 the effects of the guest worker program. If the guest worker program were included, our
414 estimates would be marginally higher.

415 In 2005, 7.2 million of the approximately 11 million illegal immigrants residing in the
416 United States were employed, accounting for approximately 4.9% of the total civilian labor
417 force (Passel 2006). The Bureau of Labor Statistics estimates that, including both legal and
418 illegal immigrants to the United States, 14.8% of the total civilian labor force was foreign
419 born in 2005 (BLS 2006). Assuming the House bill’s enforcement provisions would have
420 prevented further illegal immigrants from entering the United States, these competing bills
421 were essentially a fight over whether 14.8% or 9.9% of the US workforce should be foreign
422 born.

423 Following our methodology from Sect. 2, we can estimate the immigration surplus and
424 the potential rents from these two alternative bills. If the Senate bill became law the number
425 of immigrants in-country would remain the same and the immigration surplus would equal
426 almost \$29 billion, with workers losing a transfer to capital owners of \$331 billion compared
427 to a situation with no foreign born workers. If the House bill became law the proportion
428 of the foreign born in the workforce would be reduced to 9.9%, the immigration surplus
429 would shrink to \$13 billion, and workers would lose a transfer to capital owners of \$234
430 billion compared to a situation with no foreign born workers. Capital and labor interests were
431 fighting over a rent of \$97 billion depending on whether the Senate or House bill became
432 law. Using our model from Sects. 2.1 and 2.2 with constant returns from rent seeking activity
433 and only two interest groups, \$48.5 billion could be dissipated by rent seeking activity.

434 The public choice literature contains two main methods for estimating the welfare losses
435 from rent seeking. The first, as outlined above, estimates losses by estimating the areas of
436 profit rectangles and usually finds quite large losses from rent seeking. The second method
437 tries to measure the interest groups’ actual expenditures on rent seeking activities. These
438 estimates usually find that the welfare losses are a tiny fraction of the rents at stake.¹⁴ As
439 recent research by Angelopoulos, Philippopoulos, and Vassilatos noted, “The non-observed
440 and non-reported activities involved in creating, extracting, and contesting rents are imped-
441 iments to direct empirical estimation of the social cost of rent seeking,” and thus simply
442 counting measurable expenditures is likely to underestimate the social costs (2009: 280).¹⁵
443 Despite this difficulty, below we make a rough estimate of actual expenditures surround-
444 ing the 2005 and 2006 immigration reform bills and, consistent with the literature, find that
445 actual expenditures fall far short of the rents at stake.

446 ¹⁴See Mueller (2003: 355–356) for a summary of the two different methodologies of estimating deadweight
447 losses from rent seeking and their differing findings.

448 ¹⁵Their study uses a dynamic stochastic general equilibrium model to estimate the social cost of rent seeking
449 in Europe. They find significant social costs of rent seeking in the range of 7% of GDP.

451 Rent seeking directly aimed at influencing these bills includes activities by registered
452 lobbyists, mass demonstrations and protests, “studies” by numerous nonprofit organizations,
453 and countless lines of print and hours of talk in media outlets. Open Secrets reports that
454 314 interest groups listed immigration as an issue. But total spending by these groups was
455 only \$153 million in 2005 and \$264 million in 2006. Guidestar reports on the budgets and
456 activities of non-profits that are not lobbyists. In 2006, the budget of nonprofits that were
457 primarily focused on immigration was \$668 million, and those nonprofits that were partially
458 focused on immigration spent approximately \$2 billion. These expenditures include many
459 studies and reports “educating” the public about immigration that do not legally count as
460 lobbying but certainly were an attempt to influence public opinion about immigration policy.
461 Their budgets also include nonrent seeking expenditures as well.

462 Many people, particularly immigrants in the United States, took time to protest the House
463 bill that would have deported many immigrants. In addition to the high-profile “Day Without
464 an Immigrant” protests staged in cities around the country on May 1, 2006, many other
465 smaller-scale protests occurred while these bills were being debated. We searched US news
466 sources for estimates of the size of each of these protests.¹⁶ We estimate that a total of
467 approximately 4.7 million people took a day off work to attend demonstrations related to
468 these bills. Many of the protesters were likely low-skilled immigrants. If we conservatively
469 estimate an hourly wage of \$7 and an 8-hour work day for these protesters, then assuming
470 their absence did not affect the productivity of other workers, the deadweight cost of their
471 absence amounts to approximately \$263 million.¹⁷

472 The value of space in newspapers and time on television and radio devoted to the passage
473 of these bills is impossible to estimate. Some fraction of the time and space was simply en-
474 tertainment for readers, viewers, and listeners. But certainly some of the effort by the authors
475 and producers, and the effort of those they interviewed to write or broadcast their stories,
476 was aimed at influencing opinion on these bills and could be considered rent seeking activ-
477 ity. Although we cannot know the breakdown between rent seeking and entertainment, it is
478 clear that a significant amount of coverage was given to the issue. Searching the Lexis-Nexis
479 US print news sources database for stories involving “immigration and bill” during the pe-
480 riod when these bills were being considered overloads its search engine. Clearly, significant
481 rent seeking costs occurred in news sources.

482 The above expenditures were attempts to influence the passage of one of the competing
483 bills, but had the House bill become law there clearly would have been more rent seeking
484 and enforcement costs after the law was implemented. “Coyote” fees, paid to smugglers in
485 Mexico to help illegal immigrants enter the United States, reportedly ranged from \$3,000 to
486 \$5,000 in 2005 and 2006. With approximately one million illegal border crossing attempts
487 per year, that amounts to \$3 billion to \$5 billion in rent seeking attempts under existing
488 US immigration law. If 11 million people were deported, many of them might desire to get
489 back into the United States, which could raise the demand for coyotes and result in larger
490 deadweight losses. Of course, if the border was effectively enforced and no coyotes were
491 able to successfully operate, demand would fall to zero, lowering this deadweight cost. But
492 border enforcement costs are themselves a deadweight cost.

494
495 ¹⁶An excel spreadsheet with links to each individual story and its estimate of attendance is available upon
496 request.

497 ¹⁷Casual observation indicates that the productivity of other workers was adversely affected. I tried to order a
498 meal at an Irish pub in California on May 1st and was told the kitchen was closed because not enough people
499 showed up for work. Thus, the serving staff’s productivity was also lowered (and I had to satisfy my hunger
500 by consuming more Guinness).

501 Rent protection costs if the House bill became law would include whatever increased
502 Border Patrol expenses would be required to enforce the policy.¹⁸ As of 2006 the Border
503 Patrol's budget stood at nearly \$1.6 billion to imperfectly enforce existing immigration poli-
504 cy. It is unclear how much the budget would have had to increase to enforce the proposed
505 reform. Additionally, litigation deadweight costs would need to be added to the losses from
506 the House bill. Attempting to deport 11 million illegal immigrants would generate substan-
507 tial litigation expenses. The US Citizenship and Immigration Services office allows attorney
508 fees of \$240 an hour to be recouped when they are successfully sued. Even if we very con-
509 servatively estimate this as the market rate and assume the average deportation case could
510 be resolved with 2 hours of attorney time for each the defense and the prosecution, litigation
511 costs alone would equal nearly \$11 billion dollars.

512 Ultimately, neither the House nor Senate bills became law, so it is impossible to know the
513 counterfactual of how much would have been spent rent seeking and rent protecting to try
514 to get around the law or to enforce it. Given the above discussion, it is likely that these post-
515 passage expenditures would have dwarfed prepassage rent seeking expenditures. With less
516 conservative assumptions about litigation time, those deadweight costs alone could surpass
517 Hargerber losses and account for much of the model's predicted rent seeking. However, it
518 is obvious that actual prepassage rent seeking expenditures supporting the passage of either
519 bill represented a small fraction of the rents at stake.¹⁹

520 There are at least four reasons why pre-passage rent seeking expenditures were much
521 smaller than the formal model predicts. The first, as mentioned in the prior section, is that
522 labor and capital interests are not unified actors but instead have an incentive to free ride on
523 the rent seeking activities of allied interests, and thus under-invest in rent seeking compared
524 to the model.²⁰ Second, much of the rent seeking might have occurred after the passage of the
525 bills as efforts to evade and enforce the law, as discussed above. Third, many commentators
526 thought the House bill was simply unenforceable and that illegal immigrants never would
527 be forcibly removed, and thus interest groups did not bother investing much in rent seeking
528 prior to the bill becoming law. If these commentators were correct, what was at stake de
529 facto was much smaller than what was at stake de jure, implying that interest groups based
530 their rent seeking investment decision on the de facto.

531 A final and important reason that total rent seeking costs might be lower than the model
532 predicts is that Borjas's underlying model of immigration could be wrong. If immigrants do
533 not push down the wages of native born workers, then there is little reason for the native
534 born population to rent seek for immigration restrictions. Most economic studies find little
535 or no evidence of a general negative effect of immigration on wages.²¹ Those studies that do
536 find a negative effect generally find it only for high school dropouts and, moreover, that the
537 effect is generally small, ranging from zero to negative eight percent. Thus, whereas Borjas's
538 model assumes a large transfer from the wages of native born workers to capital owners, the
539

540
541 ¹⁸See Levine (1999) for a general model that incorporates enforcement deadweight costs of immigration
542 restrictions when estimating the immigration surplus.

543 ¹⁹See Tullock (1997) for a discussion of why explicit lobbying expenditures are much smaller than the
544 rectangles and how indirect deadweight costs of rent seeking may account for much of the rectangle.

545 ²⁰The fact that private sector labor unions (where most immigrants would compete for jobs) have become
546 weaker exacerbates the free riding problem.

547 ²¹Friedberg and Hunt (1995: 42) conclude, "[d]espite the popular belief that immigrants have a large adverse
548 impact on the wages and employment opportunities of the native-born population, the literature on this ques-
549 tion does not provide much support for the conclusion." For more recent papers debating the topic, see Borjas
550 (2003) and Card (2005).

551 reality may be that capital owners gain while most native born workers are unharmed (or
552 may benefit), and thus there is little reason to lobby to restrict immigration.

553 This final point does not undermine the policy conclusions of this paper. The main contri-
554 bution has been an internal critique of Borjas and those who use his estimates to say that little
555 wealth would be lost by restricting immigration. If that model of immigration has predictive
556 power, there are large transfers at stake, and much greater losses would come from restrict-
557 ing immigration than has been assumed. If, however, there is not a transfer from workers to
558 capital owners, as estimated heretofore, then the rent seeking losses would be much smaller,
559 but an important rationale that people use for restricting immigration, the negative effect on
560 the wages of natives, disappears. In either case, the policy implication of this paper is that
561 there should be less support for further restricting immigration than is implied by Borjas's
562 work.

563 The recent battle over immigration reform highlights the need to incorporate rent seek-
564 ing costs into estimations of the welfare effect of changes in immigration law. Using Bor-
565 jas's Harberger triangle methodology, we find significant rents were at stake depending on
566 whether the House or Senate bill became law. Using a standard model, we estimate that
567 losses from rent seeking could be orders of magnitude greater than the Harberger triangles.
568 When measuring actual rent seeking expenditures, we find that they are small compared to
569 the rents at stake and the predictions of the model. We have suggested some reasons why
570 actual pre-passage expenditures are smaller than the model predicts.

571 572 573 **4 Conclusion**

574 Although public choice scholars have modeled the formation of immigration policy as the
575 outcome of lobbying by competing interest groups, this insight had not been incorporated
576 into the literature calculating the immigration surplus for the US economy. Following Bor-
577 jas (1995), the standard methodology has been to utilize a Harberger triangle estimation of
578 the surplus while also showing a significant wealth transfer between laborers and capitalists.
579 Scholars have erroneously concluded that if immigration policy were further restricted the
580 United States would lose only the relatively small Harberger triangle. This paper has shown
581 that much of what economists have previously assumed to be a transfer could become dead-
582 weight losses because immigration policy is politically determined and interest groups will
583 invest in rent seeking to secure the transfers. We find that the potential rent seeking losses
584 from further immigration restrictions are orders of magnitude larger than the standard Har-
585 berger triangle deadweight loss estimates. A policy of completely closing US borders could
586 cause total rent seeking losses of \$193 billion—more than five times the Harberger immigra-
587 tion surplus of \$36 billion. The 2005 House of Representatives immigration bill that would
588 have required moving 11 million illegal immigrants out of the United States could have
589 reduced the US immigration surplus by \$16 billion but could have generated as much as
590 \$48 billion in rent seeking losses, though actual prepassage rent seeking expenditures were
591 considerably less than that figure.

592 This article is the first to merge the rent seeking literature with the literature that calcu-
593 lates immigration's net benefit to the native born US population. We have used the standard
594 baseline immigration surplus model. Much work remains to be done. Future research could
595 enrich the model by considering how rent seeking would impact the gains from immigration
596 when capital is allowed to vary with immigration, when immigration generates positive or
597 negative externalities, and when immigrants have skill sets different from the native born
598 population. These extensions would refine the estimations, but we expect that our basic
599

point, like Tullock's (1967) on tariffs, would remain the same: even if the Harberger triangles at stake are relatively small, placing political restrictions on the free trade of labor creates rent seeking deadweight losses that are potentially orders of magnitude larger.

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References

- Angelopoulos, K., Phillippopoulos, A., & Vassilatos, B. (2009). The social cost of rent seeking in Europe. *European Journal of Political Economy*, 25, 280–299.
- Amegashie, J. (2004). A political economy model of immigration quotas. *Economics of Governance*, 5, 255–267.
- Bauer, T., & Zimmermann, K. (1999). *Assessment of possible migration pressure and its labor market impact following EU enlargement to Central and Eastern Europe* (IZA Research Report No. 3). <http://repec.iza.org/RePEc/reports/iza3.pdf>.
- Benhabib, J. (1996). On the political economy of immigration. *European Economic Review*, 40, 1737–1743.
- Borjas, G. (1995). The economic benefits of immigration. *Journal of Economic Perspectives*, 9(2), 3–22.
- Borjas, G. (1999). *Heaven's door*. Princeton: Princeton University Press.
- Borjas, G. (2003). The labor demand curve is downward sloping: reexamining the impacts of immigration on the labor market. *Quarterly Journal of Economics*, 118, 1335–1374.
- Borjas, G. (2008). Immigration. In D. Henderson (Ed.), *The concise encyclopedia of economics*. Indianapolis: Liberty Fund.
- Bureau of Labor Statistics (2008). *Labor force characteristics of foreign-born workers summary*. <http://www.bls.gov/news.release/forbrn.nr0.htm>.
- Bureau of Labor Statistics (2006). *Foreign-born workers: labor force characteristics in 2006*. http://www.bls.gov/news.release/archives/forbrn_04252007.pdf.
- Caplan, B. (2007). *The myth of the rational voter: why democracies choose bad policies*. Princeton: Princeton University Press.
- Card, D. (1990). The impact of the Mariel boatlift on the Miami labor market. *Industrial and Labor Relations Review*, 40, 195–211.
- Card, D. (2005). Is the new immigration really so bad? *Economic Journal*, 115, 300–323.
- Chau, N. (2003). Concessional amnesty and the politics of immigration reform. *Economics and Politics*, 15(2), 193–224.
- Commander, S., Kangasniemi, M., & Winters, A. (2004). The brain drain: curse or boon? A survey of the literature. In R. Baldwin & A. Winters (Eds.), *Challenges to globalization*. Chicago: University of Chicago Press.
- Drinkwater, S., Levine, P., & Lotti, E. (2002). *The economic impact of migration: a survey*. University of Surrey Discussion Papers in Economics.
- Facchini, G., Razin, A., & Willmann, G. (2004). Welfare leakage and immigration policy. *Economic Studies*, 50(4), 627–645.
- Facchini, G., Mayda, A., & Mishra, P. (2007). *Do interest groups affect immigration?* IZA Discussion Paper Series No. 3183.
- Flores, O. (1997). The political economy of immigration quotas. *Atlantic Economic Journal*, 25, 50–59.
- Friedberg, R., & Hunt, J. (1995). The impact of immigrants on host country wages, employment and growth. *Journal of Economic Perspectives*, 9(2), 23–44.
- Ghatak, S., Levine, P., & Wheatley-Price, S. (1996). Migration theory and evidence: an assessment. *Journal of Economic Surveys*, 10(2), 159–198.
- Hamermesh, D. (1993). *Labor demand*. Princeton: Princeton University Press.
- Harberger, A. (1954). Monopoly and resource allocation. *American Economic Review*, May, 77–87.
- Haus, L. (1995). Openings in the wall: transnational migrants, labor unions, and US immigration policy. *International Organization*, 49, 285–313.
- Higgins, R., Shughart, W., & Tollison, R. (1985). Free entry and efficient rent seeking. *Public Choice*, 46, 247–258.
- Josten, S., & Zimmermann, K. (2005). Unanimous constitutional consent and the immigration problem. *Public Choice*, 125, 151–170.

- 651 Kaempfer, W., Lowenberg, A., & Mertens, W. (2004). The political economy of immigration policy: some
652 simple interest group analytics. *Journal of Public Finance and Public Choice*, 23(3), 147–168.
- 653 Levine, P. (1999). The welfare economics of immigration control. *Journal of Population Economics*, 12,
654 23–43.
- 655 Mayr, K. (2007). Immigration and income redistribution: a political economy analysis. *Public Choice*, 131,
656 101–116.
- 657 Mueller, D. (2003). *Public choice III*. Cambridge: Cambridge University Press.
- 658 Pakko, M. (2004). *Labor's share*. National economic trends. St. Louis Federal Reserve Bank. [http://research.
659 stlouisfed.org/publications/net/20040801/net_20040806.pdf](http://research.stlouisfed.org/publications/net/20040801/net_20040806.pdf).
- 660 Passel, J. (2006). *The size and characteristics of the unauthorized migrant population in the US* Pew Hispanic
661 Center Research Report. <http://pewhispanic.org/files/reports/61.pdf>.
- 662 Reynolds, C., & McCleery, R. (1988). The political economy of immigration law: impact of Simpson-Rodino
663 on the United States and Mexico. *Journal of Economic Perspectives*, 2(3), 117–131.
- 664 Scheve, K., & Slaughter, M. (2001). Labor-market competition and individual preferences over immigration
665 policy. *Review of Economics and Statistics*, 83, 133–145.
- 666 Schiff, M. (1996). *South-North migration and trade: a survey* (Technical Report 9302). World Bank.
- 667 Shughart, W. (1999). The reformer's dilemma. *Public Finance Review*, 27(5), 561–565.
- 668 Shughart, W., Tollison, R., & Kimenyi, M. (1986). The political economy of immigration restrictions. *Yale
669 Journal on Immigration*, 4, 79–97.
- 670 Sollner, F. (1999). A note on the political economy of immigration. *Public Choice*, 100, 245–251.
- 671 Thum, M. (2004). Controlling migration in an open labor market. *Public Choice*, 119, 425–443.
- 672 Tollison, R., & Wagner, R. (1991). Romance, realism, and economic reform. *Kyklos*, 44, 57–70.
- 673 Tullock, G. (1967). The welfare costs of tariffs, monopolies, and theft. *Western Economic Journal*, 5, 224–
674 232.
- 675 Tullock, G. (1997). Where is the rectangle? *Public Choice*, 91, 149–159.
- 676 Wittman, D. (1995). *The myth of democratic failure: why political institutions are efficient*. Chicago: The
677 University of Chicago Press.